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Original Articles

X-RAY METHODS OF DETERMINING THE SIZE OF THE HEART.

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The recent work of Professor Bardeen has emphasized anew the clinical importance of heart-volume and the accuracy of its determination by X-ray methods. Bardeen's first article entitled "Tables for Aid in Determining the Size of the Heart by Means of the Roentgen Ray," appeared in the American Journal of Roentgenology for December, 1917. His second publication with full details of researches may be found in the American Journal of Anatomy, March, 1918. By this work a professor of anatomy has made a notable advance in clinical diagnosis and has increased the prestige of American roentgenology.

Bardeen's method is essentially the measurement of the parallel ray silhouette of the heart upon the X-ray plate and the comparison of this measurement with normal values. To obtain the heart silhouette the sitting patient leans forward against an X-ray plate which is placed at an angle of 20 degrees. The anode of the X-ray tube is placed 2 meters from the plate. An exposure covering not less than 1½ seconds is then made, with breath held in moderate inspiration. This insures the diastolic outline of the heart in the antero-posterior position. The silhouette thus obtained must be completed by a line joining the apex of the heart with the right auricle and also above by joining the right auricle with the line of the left auricle. The area thus enclosed is readily estimated in square centimeters by means of a planimeter.

This area is larger than the true size of the heart because the X-rays diverge from a focal point. A reduction of 6 per cent. is therefore made to give the true parallel ray silhouette. The result is then comparable to that obtained by the orthodiagraph whereby the pencil and the X-ray tube move together so that the outline of the heart is traced by parallel rays.

The finally corrected area is then to be compared with the normal. It is here that the value and difficulty of Bardeen's researches becomes apparent. It was only after an immense amount of work on the cadaver and on the living, as well as an exhaustive examination of the work of other investigators, that two tables were produced giving the normal relation of the heart silhouette area to the transverse diameter of the heart, to body weight, to heart weight, to heart volume in diastole and to the height, for either sex, from childhood to old age. We are thus enabled to estimate either heart-weight or heart-volume and compare either with the normal for a given height of the patient or for a given weight, at any age.

After this brief general description we may take up a few of the more important points in greater detail.

The use of the planimeter is another example of the clever adaptation in diagnostics of an instrument developed in a widely separated science. By means of this instrument engineers have long been accustomed to estimate the square area of any surface however irregular by simply tracing the outline by the pointer attached to an arm and then reading the square inches or centimeters from a graduated disc or wheel. It would be a practical impossibility to compute the square area of the heart silhouette by any other method. The planimeter has thus become a necessary part of a clinical equipment.

The reduction factor of 6 per cent., whereby the true parallel silhouette area is determined, is a value obtained by estimating the median plane of the heart from the front of the chest as one- third the distance from front to back of the thorax. Bardeen arrived at this average by a large number of measurements in the dissecting room and by a process of mathematics from stereoscopic plates of living subjects. He was able to verify the work of Albers-

Schönberg whom he quotes. Knowing the antero-posterior diameter of the thorax, the position of the median plane of the heart, and the distance of the source of X-rays from the plate, it is a simple matter to compute the factor of reduction and obtain the parallel ray silhouette area.

The patient is examined in the sitting position because the heart is then subject to the smallest physiologic variations in size. In the standing position the heart was found to be, on an average, 13 per cent. smaller than in the prone; while in the sitting posture it is, on an average, 6 per cent. smaller. These changes in size are associated with changes in the hydrostatic pressure in the inferior vena cava and with the volume of blood accumulated in the venous systems. Bandaging the lower extremities materially reduces the differences in heart volume due to changes in body posture. It is a reproach to clinical methods that so little regard has hitherto been placed upon these changes in heart volume. Hereafter the clinician as well as the roentgenologist must specify the position of the patient in dealing with the size of the heart. It is apparent that the sitting position is the natural standard and is particularly to be chosen so that comparison of results may be made with the Bardeen tables.

The one inherent weakness of the Bardeen method is the necessity of completing the outline of the heart from auricle to auricle across the aorta and from apex to right auricle where the liver shadow joins that of the heart. To minimize the possible error Bardeen advises that the patient be given an effervescing drink before the X-ray exposure is made so as to distend the fundus of the stomach with gas. The apex and a part of the lower heart border will be defined by this maneuver. Bardeen made repeated tracings from the cadaver and by subsequent dissection demonstrated that the error from this source in estimating the true size of the heart is negligible. Nevertheless a personal equation is here introduced and the judgment and experience of the examiner became factors in the final result.

Various intrathoracic diseases may obscure the outlines of the heart to a greater or less degree so as to make the Bardeen method impossible. Examples are pulmonary tuberculosis, pleuritic effusion, empyaema, mediastinal tumor and aneurysm. Fortunately in such conditions heart volume is not often of diagnostic importance. Such diseases also interfere with the usual clinical methods.

Prior methods of X-ray estimations of heart-size consisted in the measurement of one or more diameters of the heart silhouette obtained by some specified technique. Such a diameter was compared to the diameter of the chest or to the size of the patient but no recognized tables existed and no standard method was agreed upon by roentgenologists. Likewise in works on clinical diagnosis no tables of heart volume compared to weight and height of the individual are to be found, doubtless because the determination of heart size by percussion and auscultation is so admittedly inaccurate that a table would be a supererogation. The position of the apex beat in relation to the nipple line is the almost universal criterion of heart volume used by the average clinician. This might be of more value if the apex beat represented the true apex and if the nipple line bore anything like a constant relation to the anatomy of the thorax. In short, prior X-ray and physical methods were so wanting either in standardization or in accuracy that the Bardeen method finds itself virtually without a competitor in furnishing the most fundamental datum in the clinical examination of the heart.

ETHICS.*

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The wrong-doer never lacks a pretext. No matter how crooked and insincere his ways, no one would be able to prove that he acted from unworthy motives and not from ignorance or error of judgment, even if the most flagrant violation of the glorious Golden Rule laid down by Confucius and quoted by our Saviour: "Do unto another what ye would he should do unto you, and do not unto another what you would not should be done unto you." Truly a world of ethics in a nut shell, an ocean of morals in a drop, yea, the essence of all religion.

The absence of the above code is no doubt the cause of the bloody war through which we have just passed, as the German motto was: "He may take who has the power, and he may keep who can."

Dr. Thomas Percival, an English physician, in a small book published in London in 1807, proposed an admirable code of ethics which, excepting a few alterations made necessary by the advance of medical science, is the identical code adopted by the A.M.A. and which from then

*Retiring President's address, Kent County Medical Society, December 18, 1918.

until now has instructed and guided our profession. In 1903 by unanimous vote of the A.M.A. at New Orleans the old code of 1847 was rescinded by setting it aside and substituting a series of suggestive and advisory aphorisms designated as: Principles of Medical Ethics, among which is the following noble paragraph:

"The broadest dictates of humanity should be obeyed by physicians, whenever and wherever their services are needed to meet the emergencies of disease or accident."

The highly important change secures every man's liberty and removes all clannish restrictions and penalties, and leaves Surgeons, Specialists and all others absolutely free to consult with Dr. Orthodoxy or Dr. Heterodoxy, or Dr. Homeopathy or Dr. Eclectic, or Dr. Anybody-else, when either emergency or any other impelling motive inclines him to do so.

This great change is not only like a ladder let down from Heaven to hundreds of thousands of the afflicted, but it also forever frees the regular profession of America from the old charge of "bigotry" and starts it on a still greater path of progress.

Of the prevailing tendencies in medicine, the one most to be deprecated is that to commercialism. It is perhaps not surprising that our profession, in common with other callings, should feel that baneful influence of this spirit of our age.

It is an evidence of the fact that, in the public mind, financial success has come to overshadow every other form of achievement.

The law, it is said, has almost ceased to be a profession and has become only a business, adopting business methods and business standards. May this never be true of medicine.

It is perhaps not to be expected that human nature should be changed by attaining the dignity of affixing to one's name the letters "M. D."

There are several ways in which the commercial spirit may manifest itself in medicine. One of the most common springs out of an inordinate ambition for immediate success. It is not natural, it certainly is not desirable, that great professional success should come at once to a young physician just out of his college or hospital. Time is necessary for experience to accumulate and judgment to ripen. "He who makes undue haste to succeed shall not be blameless." That shrewd advertising may bring business in medicine as well as in trade, the success of the numerous chalatans bears witness. But he does not wish to become an advertising quack and see his card in the morning paper. He adopts other devices. He advertises himself to his friends and acquaintances. His wife bends all her energies towards placing him before the public. He cultivates the acquaintance of the newspaper reporter, and soon his name finds its way into the Public Press. He is interviewed in regard to the prevailing epidemic, to remarkable operations, or with some new ideas on the subject of the treatment of T. B. He is apt to advertise to his patients and acquaintances that he is up-to-the-minute on the latest treatment and is injecting serums of various kinds into nearly every patient that he sees because it appears to be something new, without regard to any proven merit in the serum. This has two purposes—it makes a mental impression on the patient, and is an excuse for exacting a larger fee. There are ways innumerable in which the advertising doctor seeks to advance himself. To narrate is neither profitable nor interesting. To some, such practices as those described may seem only in bad taste; others, possibly, may regard them as examples of an enterprise almost meritorious. But it is difficult to draw the line as to how far one may go and yet preserve his reputation. Vaunting ambition and a desire for financial success lead to and finally end in practices absolutely dishonest, and soon lead on to the policy of doing operations which are not positively indicated for the sake of the fee. This is a subtle temptation to every physician or surgeon whose eye is always upon the almighty dollar; but it comes with increased force to one whose financial needs are great, his vision of right and wrong must be very clear and his ethical standards high not to be biased in such emergencies. He begins by contrasting his own small fees and income with those currently reported of the specialist or surgeon. "Why should I not receive a suitable commission for the business I can control? There are plenty of skillful men who are willing to divide the fee with me. The patient is well served. Who then can complain?" Such a man belongs in business, not in a profession.

This leads to the mooted subject of fee splitting on which I wish to dwell at some length. We do not for a moment deny that secret fee splitting exists and that it is an evil practice, although we do deny that it influences the patient as unfavorably as is claimed. Its very secrecy is the most objectionable feature and might, indeed, lead to

serious and even criminal abuse of professional confidence if physicians were not what they are as a class—honest, upright men who desire to do the best for their patients. Unfortunately, it is equally true in this, as in other folds, there are black sheep—dishonest men who ought to be drummed out of the profession. But this cannot be laid as a charge to the physician, as a class. Is there any class of men free from undesirable members? Even among the angels, we are told, "there was one who fell."

Mind you, I do not defend secret fee splitting. I think it is wrong and undignified. I believe it secures something to the doctor in an underhanded way to which he is justly entitled and which he should receive openly. That I may make my meaning clear, I shall here make a statement which probably will be followed by some criticism, as it will illustrate my meaning better than in any other way. I will cite a case in point. A woman consults her family physician for an acute abdominal trouble; the doctor makes a shrewd and correct diagnosis of ovarian cyst with twisted pedicle; the patient is ordered to the hospital and a surgeon called; the surgeon accepts the diagnosis of the attending physician; patient is prepared and operated upon; operation reveals that attending physician had made correct diagnosis; surgeon does not see the patient again. Physician looks after all post-operative treatment for two or three weeks till patient returns to her home, fully recovered. Now comes the fee splitting part of the recital. Patient asks the doctor for her bill; he makes a bill for $250, this to include the surgeon's fee; surgeon receives check for half the above amount, $125. Patient knows that the fee was divided and was perfectly satisfied. Surgeon was satisfied and stated that the fee was $25 more than he had expected. All parties interested were perfectly satisfied and there was no secrecy. The family physician had received a fee commensurate with the accurate diagnosis and the after treatment, to which he was entitled. If the above method of fee splitting is followed to the letter, I can see nothing that is unethical about it, and the case illustrated is only one of many, in which I have followed the plan above stated.

People have become accustomed to think rather lightly of the general practitioner who, however strenuous and anxious in time of stress, is usually unobtrusive and anything but spectacular. Compare with it the complicated machinery and the strange surroundings, and the whole array of awe-inspiring instruments, further the skilled and deft attendance of nurse and assistant, all combined to create a deep impression on the patient and his friends. The subordinate patronized position of the family physician, in the presence of the surgeon and his corps of assistants, who may not be half as capable as the modest country doctor, further contribute to lower him in the estimation of his clients.

The attending doctor's fee is too frequently forgotten, or if remembered, set aside. All the money is needed for the surgeon and the hospital.

An operation is something definite, something tangible. Notice how in a meeting of a lot of old women, some of whom "have had an operation," had one or the other organ removed, and conversation turns into an "organ recital" with obligato reflections on the shortcomings of the attending doctor.

People are not, or are only in a measure, afraid of operations. At least they like to have been operated upon. It confers a sort of distinction and furnishes an unending supply of material for conversation and gossip. Nor is the money question considered of paramount importance. A surgeon's bill of two or three hundred dollars with all the fixings of hospital expense is a delicious morsel. People pay without hesitation far greater fees to Christian Scientists, Osteopaths and advertising quacks than they would stand from their home doctor.

Just a word at this time about fees. Several of the members of the Kent Co. Society have asked me if I would not bring up the matter of establishing a fee bill for the Society on the ground that the high cost of everything that we use has increased from 50 to 100 per cent., thereby justifying raising the fees that we have been hitherto charging. My personal view of the matter is that physicians of all classes must learn to make charges commensurate with the value of their services. Fee bills hinder in this. The fee bill is the Union scale. It bolsters up the incompetent and often prevents the high class, scientific man from getting his desserts. A hide-bound fee bill and an increasing lack of appreciation of the practitioner's value dwarfs him and compels him to resort to questionable methods for playing even. He must learn to elevate his standing by special fees for his improved methods of diagnosis and treatment. These have

been acquired, perhaps by special post-graduate courses, time abroad, and special equipment, and yet his price per visit or consultation must be governed by the fee bill.

I see no objection to establishing a skeleton fee bill which would be something to refer to, as a reason for increasing our fees at the present time to keep up with the high cost of living. As an illustration, I have sent out on my monthly statements to my patients that "since Sept. 1st, house-calls, $3.00; office-calls, from $1.50 up." Thus far, no complaint has been made.

An address on ethics would not be complete without a word concerning criminal abortion. In a book entitled "The Physician Himself," published in 1906, written by D. W. Cathell, M.D., I have found the following from which I quote:

"When you are importuned to produce abortion, on the plea of hiding from the world the yet-undiscovered guilt and saving the poor girl's character; or preventing her sister's heart from being broken, or her father from committing murder or suicide, or him who has taken criminal advantage of her from being disgraced; or to avert the shame that would fall on the family; or the church scandal about one of the weak brethern; or to limit the number of children for married people who already have as many as they want, or who are just married and do not want the inconvenience of children so soon; or to accommodate ladies who assert that they are too sickly to have children or that their suckling child is too young to be weaned; or that they have been pregnant only a short time; to dry the tear that falls from beauty's cheek, or to avoid other anticipated evils; and that if you do not do it some one else will, we beg you, brother, by all the gods at once, not to stop to discuss the subject with a 'h'm' and 'haw' but meet such entreaties and arguments with a refusal prompt, strong and positive and don't even let yourself appear to entertain the proposition. If they are too importunate, inform them that they have entered the wrong door, and express your sentiments in unmistakable, upright, downright, outright American frankness; and then bow them out; but remember that these are terrible secrets, and seal your lips doubly tight. It is always safe to do right and never safe to do wrong."

With victory in the war against German autocracy, is the war against venereal disease to cease? Have you read extracts from letters to civil authorities from W. G. McAdoo in behalf of the U. S. Public Health Service? If so, you have been impressed with the fact that Mr. McAdoo knew something about health measures as well as selling "Liberty Bonds" and running railroads. I append a few quotations from him:

"Under the protection of the military authorities, four million soldiers and sailors received greater protection against venereal diseases than they received before the war in civil life. The cities and towns through which they go and to which they will return upon demobilization must be made safe. The fight * * * * * must be vigorously continued.

Extract from telegram to governors from Newton D. Baker, Secy of War.

"Signing of armistice in no way lessens responsibility of civil communities for protection of soldiers from prostitution and sale of liquor. Our states and cities ought never to lose the control which has been established or stop so vital a work. War Department is determined to return soldiers to their families and to civil life uncontaminated by disease."

Extract from statement by Josephus Daniels Secretary of the Navy.

"One of the compensations for the tragedy of war is the fact that an enlightened opinion is behind the organized campaign to protect the youth against venereal disease. The campaign begun in war to insure the military fitness of men for fighting, is quite as necessary to save men for civil efficiency."

All of the above will show that venereal diseases are a peace problem, and our Society should take hold of it and give it the attention which it deserves, and we should use our best endeavor to extinguish the light in the Red Light District.

In writing of ethics, one becomes enthused by the topic and is apt to go on at too great a length, consequently I will close by saying that the preceding is the situation which is now confronting us and it is high time to separate the sheep from the goats, if medicine is a profession that stands for something more than mere commercialism, if it possesses every quality that is honorable and noble. Let us do nothing to disgrace it. We should rather raise it until it has reached the climax of ethics and its standard has become the highest obtainable.

REPORT ON SIX HUNDRED AND THIRTY-EIGHT HERNIOTOMIES PERFORMED DURING MAY, JUNE, AND JULY OF 1918.

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May 1, 1918, the Surgical Service at this hospital was notified that the 158th Depot Brigade contained approximately five hundred men who were awaiting operation for hernia. During the previous existence of this hospital a few herniotomies were performed but on account of the existence of various camp epidemics involving a tendency to bronchial and lung infections, no attempt had been made to clear up the large number of hernias admitted to the Camp for remediable purposes. It was the order of the Division Surgeon that only such cases be operated upon as presented a reasonable prospect of success from a military standpoint and that large hernias with weak abdominal walls should be refused operation. A member of the Surgical Staff was designated to examine all the cases and as a result of his examination, approximately 10 per cent. of the cases were rejected and discharged from the service. The number of cases remaining was four hundred and ninety-two, presenting six hundred and thirty-eight hernias, classified as follows:

Inguinal, right, complete	128
Inguinal, right, incomplete	190
Inguinal, left, complete	83
Inguinal, left, incomplete	207
Femoral	7
Umbilical	12
Ventral	11
Total	638

These cases were operated upon between May 1st and July 31st, eighty-six in May, three hundred and twenty-six in June and two hundred and twenty-six in July. The operations performed were as follows:

Bassini	512
Ferguson	94
McEwen	2
Femoral (Ochsner)	2
Femoral (Imbricated) (fascia)	5
Umbilical (Mayo)	12
Ventral	11
Total	638

The personnel of the Staff at the Base Hospital is constantly changing as its function is not only to care for the sick and injured, but to serve as a Training School for Officers, Nurses and Enlisted Personnel. Consequently officers are frequently leaving on assignment to overseas units and others are as constantly reporting from civil life or from Training Camps. It was the custom of the Chief of this Service, (during the period covered by this report Major C. T. Sturgeon, now Chief of Surgical Service in Unit No. 108) to assign each member of the Staff for his turn in the Operating Room, either as operator or assistant, the usual practice being to assign two as a team at one table, who alternated as operator and assistant. Therefore the number of operators concerned in this series was very large. It was also left to each operator to decide on his own technique. It would then be reasonable to conclude that the results in a large series of cases would not be so favorable as in a similar series operated by one skilled and experienced surgeon. There were numbered among our operators many distinguished and experienced surgeons, but there were also many young men fresh from internships. It was the custom to associate these young men with the experienced and thus afford them instruction in operative work. At first there was much difference in technique used, but later the practice became quite uniform. In the majority of cases the sac was separated and ligated high up and permitted to slip up under the Internal Oblique and was not Kocherized. The shelving edge of Poupart's Ligament was attached to the Conjoined Tendon with No. 3 chromic catgut sutures and the cord transplanted, the External Oblique being sutured with continuous chromic gut. Skin and superficial fascia were closed with interrupted silk worm gut sutures. In ninety-four cases the cord was not transplanted, this being the only distinction between the so-called Bassini and Ferguson operations.

The routine of preparation for operation was the same for all and was as follows: The patient's abdomen was scrubbed the day before and shaved and the abdomen covered with sterile gauze, which was removed in the operating room. Castor-oil was given two days previous to operation if the patient was in the hospital in time. Under no circumstances was

a laxative given the night before operation. After the patient was anesthetized the abdomen was washed with benzine, dried and painted with three and one-half per cent. tincture of iodine. The operators' hands were scrubbed with green soap and hot water for ten minutes, soaked in lysol solution for two minutes and rinsed in sterile water, dried and covered with rubber gloves sterilized in the autoclave. Fresh gloves were of course donned for each operation, but the aprons were not always changed unless soiling had occurred, the fronts being covered with fresh sterile towels. The wounds were covered with sterile gauze securely fastened in place with adhesive strips and not disturbed for ten days. Patients were permitted to sit up in two weeks and in three or four weeks were discharged to the Infirmary of the Development Battalions with the understanding that they should not be returned to full duty until two months after the operation.

There were nine cases of superficial infection, the organism in each case being the Staphylococcus Albus. All the infections were superficial and did not interfere with the wound healing or the success of the operation. The one case of recurrence coming to the attention of this service was not infected. In that case the cord was not transplanted. This was done however, at the re-operation in September.

It was not practicable to conduct operations regularly in the afternoon as the nurses required that time to prepare for the next day and the plan adopted June 1st, which made it possible to perform so many operations in so short a time in addition to caring for the large amount of other operative work, was to place two tables in one room running two operating teams at the same time. One of the Staff had charge of preparing the patients and starting the anesthetics, so that the operators were subjected to no delays between cases. Three anesthetists were always available as well as four nurses and a sufficient number of orderlies. Other operating teams cared for other classes of cases in the second operating room. Ether was the universal anesthetic used, except in a few cases toward the last of the series when Nitrous-Oxide-Oxygen was used. By this method on some days twenty-five herniotomies were performed between seven-thirty and twelve o'clock.

A few cases of pneumonia presenting type IV. pneumococcus developed, and finally a severe outbreak occurred in one ward, nine cases appearing in one day. This led to a survey of the ward by the Laboratory under the direction of the Chief of that Service, Major C. P. McCord. Of forty-eight people connected with the ward, forty-four were found with pneumococcus type IV. in their throats. This ward was quarantined, the inmated caused to use a gargle suggested by the Laboratory consisting of a solution of 1:10,000 Quinine Bi-Sulphate. After three days all the throats being found sterile, operations were resumed from this ward and no further pneumonia occurred. After that experience the rule was adopted that all cases must use this gargle for two days preceding the administration of ether. No case of post-operative pneumonia occurred after this rule was adopted. The disease in nearly all cases terminated by crisis in four days and all recovered. The Surgical Staff acquired so much faith in this simple gargle as an agent to destroy pneumococci in the throat that they faithfully used it during the influenza epidemic in October and attribute to that practice their freedom from pneumonia. No member of the Surgical Staff, nor of the nurses or orderlies connected with the Operating Room contracted pneumonia during the epidemic, although all of them did work on the Medical Service and were repeatedly exposed to the infection. Several of them had influenza. The Quinine Solution is a specific germicide for the pneumococcus, but not for other organisms.

It is not possible to report definite results on all these cases on the question of permanent cure of the hernia. So far as this Service is concerned, only one case has come to its attention with a recurrence. He was operated in July and was sent to the Disability Board at this Base Hospital in September with a request for his discharge on account of recurring hernia. Reference to his history disclosed that he had been operated upon by a competent surgeon, that he had suffered from no infection and had been discharged from the hospital three weeks following operation. It transpired that he had been sent to his organization instead of to a Development Battalion and had been subjected to full duty at once. He was admitted to the hospital and re-operated with satisfactory results. Three hundred and ninety-two of the cases composing this series were

transferred to Development Battalion No. 2. The infirmary of that Battalion has the records of all discharged from the service and of the present disposition of those remaining in the Battalion. These records number one hundred and seventy-eight cases, the remainder having been transferred to other camps or to other organizations. That leaves one hundred who were returned to their line organizations or to other Development Battalions. Many of them were members of the Base Hospital Detachment and are still on duty. None of the Detachment men have suffered from recurrence.

A Development Battalion classifies its men as follows:

Class A—Fit for general military service.

Class B—Fit for limited military service, but in good condition; able to march five miles a day.

Duty Grade—Fit for labor organizations.

November 14th, 1918, the Commanding Officer of Co. C, Development Battalion No. 2, kindly informed me that the one hundred and seventy-eight hernia cases remaining in his organization who were operated in May, June or July, which included all the cases operated upon during those months who had been discharged by the Disability Board of the 158th Depot Brigade, were classified as follows:

28 per cent. Class A.

43 per cent. Class B.

23 per cent. Duty Grade.

6 per cent. Discharged.

"Of those discharged 4 per cent. were for other causes than hernia. Of the 43 per cent. Class B men, 40 per cent. will be placed in Class A within the next thirty days. The 23 per cent. duty Grade will be placed in labor organizations and are so placed for other reasons than their herniotomies."

It appears then that in an average period of four and a half months there have been 2 per cent. recurrences in one hundred and seventy-eight cases. This, however, includes all the known recurrences in three hundred and ninety-two cases, the remainder having been transferred to other camps, free from recurrence. In course of time recurrence will take place in other cases no doubt, but it is not likely to exceed 2 per cent. of all cases operated. This result compares very favorably with the results obtained by individual operators in large series of cases. No death occurred in the series.

In conclusion the writer expresses the opinion that the most important thing to consider in performing a herniotomy for inguinal hernia is the treatment of the sac. If the sac is thoroughly separated from the tissues of the cord and ligated at the reflection of the peritoneum the hernia is not likely to recur whether in subsequent proceedings the cord is transplanted or not. Many of our cases were of the incomplete type and it is necessary in such cases to raise the cord in order to locate the sac which invariably comes out of the abdomen underneath the cord. Many of the operators transplanted the cord in all cases of this kind and did not transplant if they found it unnecessary to raise the cord from its place in the canal. Exposure of the shelving edge of Poupart's ligament freeing it from fascia and securely sewing it to the conjoined tendon whether underneath or over the cord, is considered vital to the permanent cure of the hernia.

PEACE AND WAR IN THE HUMAN ORGANISM.*

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MARQUETTE, MICHIGAN.

*Read at meeting of Michigan State Medical Society, held at Houghton, Michigan, August, 1916.

Life lapses into Death, and Death to Life,
What space between is growth or slow decay,
Resistless mankind feeds the constant strife
While cycles Earth to elemental day.

Mr. President and Gentlemen:

If I have dared to caption this paper with those introductory lines from an old college-day fugitive poem, it is because it fairly well expresses the constant struggle of the human organism, from the cradle—aye and before it—to the grave, to live in that state of stable equilibrium which we know as health, or peace, or harmony with its environment.

In the Universe itself, with its sidereal systems, suns, moons, planets and other bodies, gaseous and solid, we observe that by attraction and repulsion, these various systems and bodies live in quite a state of harmony—yet even here collisions occur, and sometimes the smaller body meets absorption or destruction by one of its larger neighbors. Still the ideal striven for, is that of peace—of live and let live—of health—of harmony.

When we consider our own little planet and its chief living occupant—homo sapiens—we find here also a desire or innate ideal of peace which however embryonic in the early stages of man's existence still has been making itself more and more evident as the centuries progress—but how imperfectly the ideal is as yet

developed, can be easily demonstrated by the present great conflict of nations—the greatest of historic or perhaps all times.

The enemies of the human organism itself may be divided into two great classes—(1) External—or those operating from without, and (2) Internal—or those operating from within. Of "External" enemies which operate against mankind as a whole we have, firstly, the great external causes which might be called *cosmic*—such as earthquakes, volcanoes, tidal waves, floods, famines, cyclones, fire, frost, and electrical storms; secondly, those which might be termed *animalistic,* such as wild beasts, poisonous reptiles, centipedes, lizards, tarantulas, sharks, etc.; thirdly, those which for want of a better name might be classified as *mobilistic* —and the result of accidents during transportation by railroad, boat, automobile, horse, and latterly, aeroplanes, and their like; and lastly, we have the *fatalistic* or those which are the result of violence exercised by man himself—against himself or his neighbor—such as suicide, rape, murder, legal execution and war.

Of "Internal" enemies operating on a large scale, we have disease epidemics—now mostly under control in times of peace, such as plague, cholera, smallpox, typhoid, yellow-fever, malaria, etc.; and also have we the great universal triad of human destroyers—Tuberculosis, Cancer and Venereal Diseases.

Taking a closer view of the human organism in its struggle not only for life itself, but for peace during life—or what is otherwise called health—we find oftentimes, that war is declared upon the prospective human adult, from the very moment of conception, and continued until mortality claims its own. Thus, we might further classify enemies of the human organism into (1) Pre-natal and (2) Post-natal. Pre-natal enemies might be further subdivided into those operating (1) at conception (2) during gestation and (3) at birth. Under the heading "at conception" the first fatal error of the embryo is to locate itself in a wrong habitat—otherwise known as an extrauterine pregnancy. We can also list here such enemies as syphilis and the hereditary diathesis of such diseases as tuberculosis, leprosy, carcinoma, scrofula, gout, insanity and many others.

"During gestation," the perils of the growing foetus are indeed numerous, for besides the many unavoidable and accidental dangers of miscarriage, there is frequently added the murderous assault of both lay and professional abortionists.

"At Birth," if our homunculus has survived the pitfalls of a diseased placenta or a placenta previa, it may now succumb to one of the dangers of dystocia—such as uterine fibroid, ovarian cyst, deformed pelvis, or it may furnish its own offensive weapon in the form of a hydrocephalic tumor. It may be further endangered by a mal-presentation or it may hang itself by the neck until dead. Escaping all these perils, it must now run the gauntlet of the unqualified midwife and the careless or inexperienced physician, who may bury the poor little "toddlekins" through ill-timed or misapplied instrumentation—or by the faulty ligation of the unbilical cord.

Now, when we come to consider the "post-natal" enemies of mankind, we find amongst others in the early months of life, the inability to secure breast-food—the ignorance about infant feeding and management—a hard problem at best, and especially where poverty, filth and squalor abound, in other words, where exists an unfavorable environment. At this time, were it not for the inextinguishable devotion and self-sacrifice of parental love, there would be many more of the infant human organism that would never see maturity.

Of "internal enemies," even *the infant* is soon beset by many foes—principally, those of the digestive tract, from defective nutrition—and microscopic antagonists either of intestinal origin, or those of the so-called zymotic diseases. It is now, also that if the luetic embryo is world-born, that arch-enemy of humankind-syphilis, strikes fearfully and abhorrently at the citadel of life, or conquered temporarily, awaits a more favorable opportunity for further attacks.

During the early years, i. e., of childhood, the human organism has to contend with such external enemies as accidents of various kinds —blows, falls, cuts, burns, explosions, drownings and so on, ad infinitum—but still the internal enemies are the most formidable: unbalanced secretions, intestinal toxaemias, perverted metabolism, zymotic diseases, pyorrhoea, adenoids and infected tonsils with all their disastrous sequelae of secondary infections.

During adolescence, besides the usual accidents, we have the external and internal injuries resulting from strenuous athletics, while from within we must note the greater incidence of tuberculosis, the liability to venereal disease, and oftimes, the entering wedge of alcoholism.

During the third and fourth decades, with the exception of the perils of child-bearing, mankind enjoys a comparative immunity from many internal enemies, and this period might well be called the "Golden Age" of man.

It is about the fortieth year of life that the wear and tear of human machinery usually begins to manifest itself, by disturbing the peace of the human organism with a new set of internal enemies, of which many are of so slow, insidious and chronic a nature, that they evoke in the recipients of their attacks, all the refinements of suffering—in other words—all the horrors of war. Amongst these might be mentioned, the products of perverted cellular morphology, such as cancers and sarcomas, with cysts, tumors and growths galore, ulcerations and obstructions of the digestive tract—the scleroses, with lesions of heart, kidney, liver, gall-bladder, spleen, pancreas, uterus, ovary and so on—whilst from childhood to old age—

Mr. Little Old Appendix, in ambush all the time,
Keeps his finger on the trigger that may make your life sublime.

In old age—for those few who reach there, as if hungry for its prey, there lies in wait the troubles of the prostate, with hypertrophies, dystrophies, atrophies and degenerations of all kinds—not excepting those of the brain, now growing useless to the lambent soul within; and here we will leave the human organism as Shakespeare describes him: "Sans teeth, sans eyes, sans taste, sans everything."

Now, to meet the onslaughts of so many varied and powerful antagonists, let us consider what the human organism can do to maintain peace and avoid destruction. To be brief, for the subject in detail is well nigh inexhaustible: (1) The first and most powerful defender of the human realm is the big policeman—Mr. Vis Medicatrix Naturae, and were it not for his able and efficient administration of internal economies and life—processes, the incompetency of the medical profession and other second lines of defence, would soon be thoroughly demonstrated. The existence of this guardian of human welfare has been known for centuries, but it is only of late years that we are learning something of his weapons and methods of defence—such as the functions of internal secretions, the process of leucocytosis, thermic regulation, elimination, and antitoxin-formation by the blood. Unfortunately, this great protector of the organism has also been the screen under which all manner of "pathies" and "isms" have flourished, and formed themselves into cults and basically wrong schools of Medicine.

Of ulterior methods of defence we should have: (1) A constant raising of the standards of the medical profession with a greater dissemination of the benefits of specialization. A right move in this direction has been the formation of the American College of Surgeons which, though it may for a time, work some discriminating hardships on numerous surgeons of excellent ability, will ultimately, prove of great and lasting benefit.

(2) We should give the human organism a clean heredity, by legislation controlling marriages, and permitting the asexualization of the manifestly degenerate. But better still, would be a propaganda of education, beginning in the school-room and based on the biblical injunction—"Know Thyself."

(3) Utilizing and improving upon every existing measure of child protection and social reform, from Fresh Air Funds and the prohibition of exhausting child-labor, to sanitary housing, playgrounds for old and young, social centers more attractive than the saloon, and popular education on vital subjects by the "lectured" moving picture show.

(4) The greater prominence attached to the full-time Health Officer whose work in the school-room and in matters of sanitation is not yet half appreciated and who should be amongst the best paid and most respected of our citizens. The functions of this office should be enlarged, so that the poor especially could have opportunity at any time, in sickness or in health, for adequate instruction in preventive measures and competent diagnosis of diseased conditions, with recommendations to the proper therapeutists for care and treatment.

(5) The employment of all legitimate means of exploiting the truth regarding fake medical nostrums from "oxydonor" tin-tubes to Christian Science adumbrations of the spirit—which latter cult with its ostrich-like head-in-the-sand nescience, never seems to recognize the limitations of the basic centuries-old-fact, that faith and a cheerful spirit are but factors and not always essential in numberless therapeutic measures that are positively indispensable.

Before closing I am tempted here to draw an analogy between the attempts of the various fluids, organs and tissues of the human organism, to maintain a stable equilibrium—which means peace, and the semi-conscious

strivings of the various races, nations and governments to attain the same thing amongst themselves, viz. peace or harmony or social equilibrium.

Though spasmodic experiences of peace on earth and good-will to men, have demonstrated to all the great desirability of such a condition, the enemies of such an idealistic state are numerous and a few may be mentioned as follows:

First—One of the greatest enemies of peace on earth is *prejudice,* i. e., prejudice of race, religion or nationality. When a Caucasian for instance, is brought suddenly into contact with another man of a different ethnological group, such as a Malay, Negro, Indian, Chinese or Japanese—unlikeable differences in physical appearance, manners, customs and methods of government are quite sufficient when emphasized in conflicting interests to provoke enmities or even war. It is the same with religious faiths—for as each expects to gain everlasting rewards through the exercise of his particular faith, he is naturally at variance with the other fellow who says he has the only authorized road to heaven. By the same token, religious sects of the same faith, who may differ on matters undemonstrable—and therefore unessential—often act as disturbers of the peace of communities, if not of nations. Amongst nationalities, as has frequently occurred in the past, as well as at present, a nation may assert its self-believed dominancy and try to inflict its own self-asserted superiority of "Kultur" upon a people, a continent or a world if need be, while at the same time, it is not averse to a few items of indemnity, colonial expansion, extra-territorial rights and so on.

Second—As a provocative cause of envy, malice, jealousy and hate—and therefore of enmity—is Mammon-worshipping, or desire for great wealth, which is limited to no one nation or individual, but possessed in varying degrees by all, is perhaps one of the greatest enemies of the peace of the world—for it breeds the festering sores of commercial jealousy and economic rivalry.

A third enemy to the world-harmony is the existence of a non-producing so-called nobility class—of barons, dukes, earls, princes, et. al.—generally possessed of great landed estates which should be owned by the people who work them. This privileged class or aristocracy seldom has any other occupation than that of military or governmental service, and when allied with its congener the plutocracy—we have a combination that is very much interested in the production and maintenance of that other great menace to a state of social equilibrium—vast armaments on land and sea, under the sea, and latterly, in the air.

I would mention a fourth great enemy to the peace of nations and that is—oligarchical forms of government—with one-man controlling power, be he czar, emperor, king or chief of a savage tribe, and it is quite conceivable how the personal ambitions, envies and petty jealousies of these autocrats, might disturb the peace of the world under pretexts quite plausible to the countries they govern. A precedent of this kind can be cited—for a king of France once received a good trouncing for sending to the king of England a set of tennis balls with a hint that such a game was better suited to his prowess than the stern game of war.

Now, with all these formidable adversaries and age-long antagonists to the comity of nations, who is he—and where can be found that wonderful being—who from the alchemy of thought can devise a remedy that will purge the world of all its vast uncleanness, and restore and maintain its numerous and diversified component parts, in a state of health which is peace, which is social equilibrium?

One great statesman might fight for national disarmament as the only effectual panacea; another bright mind might plead for a greater toleration of religious thought and respect for the manners and customs of others; still another man might offer socialism as the sovereign remedy, while some one else might be content with the universal establishment of democracies. The latest proposed specific for all these ills of the body-politic, is the federation of all countries under one central government, with a system of international police.

Aye, you will hear these and a hundred other remedies prescribed as specifics for this great malady of the times, but let me venture to assert to you, my co-workers in a noble profession, that all will act but as placebos for an undiagnosed condition, for this is a disease of the head and not of the heart: the heart of the world is all right—but its head has gone a-maundering after false gods and false ideals; like the vix medicatrix naturae in the human organism, the sovereign remedy is ready at hand in the mind of man himself, and never shall we find on earth that peace which the world desireth, until, in perfect unison, the nations of this benumbed sphere acknowledge the authority and obey the mandate of the Great Physi-

cian—the Prince of Peace—when He said unto them—

"LOVE YE ONE ANOTHER."

Room 209 Savings Bank Bldg., Marquette, Michigan.

THE FIELD OF LOCAL ANESTHESIA IN A WAR HOSPITAL.

LOUIS J. HIRSCHMAN, Major M.C., U.S.A.
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Among the many interesting surgical methods revived and elaborated through the stress of military needs, the employment of local anesthesia has been of great value in the surgery performed in a military hospital.

Base Hospital 17, Harper Hospital unit of Detroit, was located in a city of 130,000 inhabitants. This city was a great railroad center and was on the direct line traversed by many of the American Expeditionary Forces in going to and from the front. Many thousand troops were encamped in the vicinity of this hospital, and among those freshly arrived from the U. S. A., it was not at all infrequent to find cases of hernia, rectal diseases, abscesses and other conditions met with in civil practice. The prevalence of coughs, colds and pulmonary diseases in France, and the susceptibility of the freshly arrived American troops to the same, made the employment of general anesthesia impossible in many cases requiring surgical measures for their relief.

For years the writer has been employing local anesthesia in the treatment of diseases of the rectum and anus, as well as in the radical treatment of hernia. On account of its many manifest advantages over general anesthesia, it had been used in suitable cases as the anesthetic of choice in civil practice. In a war hospital where expedition in the handling of surgical cases, minimized hospital confinement, and early return to duty were of prime importance, anything which would hasten the desired ends, was of distinct benefit. Added to this was the prevention of the great danger of post-anesthetic complications, involving the lungs and kidneys, as well as the fact that on account of the absence of post operative vomiting, the patient's nutrition could be built up so much sooner. Another important advantage is the fact that the anesthetist can be dispensed with. This releases a medical officer for other more important duties. An operation under local anesthesia can be performed more rapidly than in the time allowed for the administering of a general anesthetic and of performing an operation together. This meant more surgical operations could be performed in the same length of time.

In addition to the surgical procedures mentioned above, many operations on the scalp and skull, rib resections, amputations of fingers, and secondary suture of wounds of considerable extent, excision of infected wounds, operations for phimosis, varicocele and bubo were performed readily under local anesthesia.

In the author's surgical service, the average time required for an operation for inguinal hernia was seldom over twenty-five minutes. Five or six rectal operations were performed in one hour and the average secondary suture required about the same time. Rib resections were completed in fifteen minutes and colostomies and the operation for appendicular abscess were performed in fifteen minutes.

The employment of a hypnotic before operations under local anesthesia is of prime importance. The administration of twenty grains of chloretone one hour before operating, or of a quarter or third of a grain of morphine one-half hour before operating was the author's usual practice.

The patient would come to the operating room in a quiet tranquil frame of mind. His ears were muffled with cotton and a towel placed over his eyes and all unnecessary noises and conversation eliminated. If however, a patient wishes to converse with the operator, he was allowed to do so, and oftentimes the operation took on more of the character of a social visit, than that of a surgical procedure. Patients would leave the operating room smoking cigarettes and would go back to their wards cheering up the patients who were to follow.

The absence of after-pain was a very pleasant feature of the employment of local anesthesia. The solution used was one quarter of one per cent. novocain to each ounce of which was added six drops of solution of adrenalin chloride. It is of the greatest importance to use sufficient solution to secure pressure anesthesia and important nerves such as the ilio-inguinal in hernia should be well blocked by perineural infiltration.

Any of the operative measures used under general anesthesia in the treatment of hernia can be just as well employed under local. The average time required for the hospitalization of a hernia case where local anesthesia was employed in its cure was reduced one week. The value of this saving of time in military life is

of great importance and in civil life, it should be equally so.

Sepsis was practically unheard of, in fact did not occur as often as in cases operated under general anesthetic, which the author believes is due to the fact that there is less handling of the tissues under local than under general anesthesia.

In rectal surgery, it is unnecessary to dilate the sphincter. The employment of local anesthesia by its relaxation of the sphincter allows a better field for operative measures than the divulsed and damaged sphincter of the old regime.

Moreover the patient in most of the cases is allowed to be up and about after the first twenty-four hours. Convalescence and an early return to military duty is hastened. Patients after most operations performed under local anesthesia, seem to vie with one another in the speed with which they could be returned to duty.

In the surgical treatment of war casualties, the removal of foreign bodies, such as machine-gun bullets and shell fragments was very easily accomplished. The most suitable cases were those in which localization by the X-ray demonstrated the presence of foreign bodies in the soft structures and not embedded in bone.

Suturing of lacerated wounds, particularly of the scalp was a very favorable operation under local anesthesia. Debridement, or the excision of devitalized tissue in a wound, could be done surprisingly well, provided the wound was not too extensive or involved too much muscle. Secondary suture of superficial wounds was an ideal procedure under local anesthesia.

To recapitulate, any operative procedure which can be done just as thoroughly under local anesthesia as under general anesthesia, should be performed for the following reasons:

1. It is safer.
2. It can be performed more rapidly.
3. Shock is absent.
4. Fewer assistants are required.
5. After-pain is absent.
6. Patients can take nourishment immediately.
7. Recovery is hastened.
8. Convalescence is shortened.
9. There is no fear of anesthesia.
10. Less handling of the tissues means less danger from sepsis.
11. The mental attitude is better toward local than general anesthesia, which materially assists in his convalescence, and in a ward is reflected on his fellow patients.
12. Post anesthetic complications are absent.

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A CASE OF CONGENITAL PTOSIS.

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Malformations and failures in development are frequently observed in a clinic or hospital for children. While they are always of interest, it is unfortunate that we can not do more to remedy them. Dr. La Ferte has spoken of the various forms of spina bifida that he has encountered at the Children's Free Hospital. I wish to present a little patient who exhibits a failure of development in that she is unable to elevate the upper eye-lids sufficiently. The lids droop and she has a sleepy expression. Vision is interfered with, for while the pupil lies in the palpebral space when she looks downward it is covered by the lid when she looks upward.

The condition is designated congenital ptosis and results from lack of development of the levator muscles. Unlike acquired ptosis, resulting from paralysis of the third nerve, both eyes are usually affected. Sometimes a few fibers of the levator muscles are apparently present for the eye-lids can be partially raised by them but in this case I have not been able to demonstrate any action by the muscles.

Very early in life children with congenital ptosis learn to use the frontalis muscle to partially open the eyes. By contraction of this muscle the eye-brows are raised and with them to a varying extent the lids. Therefore one observes skin-folds on the foreheads of these patients. Moreover if the head is tipped backward while the patient looks downward the pupil is not covered by the lid and relatively high objects can be seen.

I have performed the so-called Hess operation on the right upper lid in this case. An incision was made along the entire length of the eye-brow. The skin of the upper lid was dissected loose to the lid-margin. Three doubled-needled sutures were then introduced through the lid near the lid-margin and were brought out through the skin of the forehead a few centimeters above the brow where they were tied over gauze rolls. The original in-

cision was then closed. The sutures were left in place for two weeks. The aim of the operation is to cause a growth of connective tissue along the threads and form tendinous outshoots from the frontalis to the skin of the lid thus reinforcing the action of that muscle. Moreover the lid may be slightly folded and shortened.

In this case I have not been successful in producing a fold but you will note that the patient when she tries, is able to open the right eye much wider than the left. I am told by her sister that she no longer tips her head backward when looking at objects but is able to see them through the increased frontalis action. The operation has therefore helped matters and one can feel encouraged to try the same procedure on the other side.

Jerusalem (By Mail)—How American Red Cross physicians engaged in relief work here are accomplishing worth while results in the face of great difficulties—and what they are up against, is shown in a report just received here from W. S. Dodd, A.R.C. doctor, working at Mejdel in this section.

With two capable English trained nurses, and three native helpers, more or less useful Dr. Dodd, his "hospital" housed under tents, performed 252 operations in seven weeks, besides giving medical examinations, treatment and counsel to hundreds of the destitute inhabitants and refugees.

His report says in part: 'The work of the Hospital was of the plainest sort, it might be called primitive. About twenty-five tents comprised the Hospital proper, with a Dispensary tent, and tents for the living quarters of the staff.

The soil was all the purest sea-sand with thistles and scant grass; going barefoot was the universal custom, and in our own quarters we of the staff used to follow that custom with great pleasure. * * *

"The professional side of the work was of the greatest interest to me and every day was a pleasure. The clinics numbered sixty to a hundred a day. Of course we had all classes of cases in medicine and general surgery, but by far the larger proportion of our patients were eye-cases.

"Of the 252 operations that I did in less than seven weeks, 222 were for the eyes. This is the number of persons operated on, most of them having more than one operation, perhaps on all four lids, so that I really operated on 408 eyes.

"There were some cataracts, not more than would be seen in the same number of cases elsewhere, but Trachoma and its consequences accounts for almost all of the eye troubles in this land. I set out to treat cases radically and secured fine results when I could keep the patients long enough for a reasonable after-treatment. But even so, the number of eyes that can be saved from partial and total blindness is large and the economic value of each eye thus saved is enough to make the prosecution of this line of work of the greatest importance for the redemption of the land.

"The accident cases are always interesting. I had the last end of treatment of some cases of bombed hands, of which there had been quite a number in the earlier days. These were largely in children, and were due to their picking up unexploded Turkish bombs that were lying in the fields from the time of the British advance in the Gaza region. Many fingers and even hands were lost from this cause.

"Vermin was the great enemy we had to fight. Fleas were hardly counted as a problem because we could do nothing against them, they were everywhere and inevitable, and so far as we know at present not being the carriers of any special disease, did not come within the hostility of a medical conscience.

"Lice and maggots were a daily terror. How many wounds and injuries came to us filled with maggots I can not tell. A favorite dressing for a wound is a piece of raw meat, a breeding place for maggots, and they can hardly be blamed for invading the adjoining premises.

Many a child had to be put under chloroform in order to search out and pull from their hiding places deep in the middle ear a half dozen wriggling maggots whose every motion was causing torture to the innocent victim.

"A woman came to the clinic complaining of headache. A single sore on her face lead to questioning, and when she rather unwillingly undid her turban we found an exaggerated case of impetigo, and every separate sore was as if the whole thickness of the scalp down to the bone had been punched out, and every sore was a nest of maggots. I removed 60 at the first seance, and at the first dressing next day the nurse had more to do. The headache was cured without further treatment. And these are not the most loathsome cases that we saw.

"Another great difficulty with which we had to contend was the filthy habits of the people. In spite of providing proper sanitary facilities, we were compelled to have a scavenger go around every morning and clean up the filth from around the tents of the patients. The women were as bad offenders as the men. We made it a rule that anyone known to have violated these simple sanitary regulations must go without their dinner next day, and this was quite an effective punishment."

During November the following articles have been accepted by the Council on Pharmacy and Chemistry for inclusion with New and Nonofficial Remedies:

National Pathological Laboratories: Rabies Vaccine (Harris).

Schering and Glatz: Creosote Carbonate, S. and G. Guaiacol Carbonate, S. and G.

TRANSACTIONS

OF THE

Clinical Society of the University of Michigan

Stated Meeting, May 1, 1918

The President, JAMES G. VAN ZWALUWENBURG, M.D., in the Chair
Reported by REUBEN PETERSON, M.D., Secretary

A NOTE CONCERNING THE EPIDEMIOLOGY AND TREATMENT OF AMEBIC DYSENTERY WITH A REPORT OF TWO CASES.

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Amebic dysentery has in the past been reported and discussed in this Clinic because of the apparent rarity of the condition in these latitudes. At present such is no longer the conception, but conditions abroad, which will sooner or later be brought home to us, warrant a review and make a discussion distinctly worth while just at this time.

The troops from the tropics are carrying their flora of animal parasites with them to the lines in France, and the spread of the infections is especially favored by the intimate relations and exigencies of camp and trench life. England has already reported the inevitable effects; great numbers of British soldiers have become infected, consequently incapacitated and sent home for convalescence. At this point the problem has begun to assume a position of unusual importance, for the ordinary limits of the geographical distribution of the tropical diseases are being widely extended and not only the military, but the civilian population as well, is being threatened. Amebic dysentery is undoubtedly the most important, the most dangerous, and the most resistant to cure of the tropical parasitic conditions to which our soldiers will be exposed. It is of especial interest to us because of its, by no means infrequent, troublesome presence in our midst in the north temperate zone even under the ordinary conditions, in times of peace.

The recent occurrence of two cases of amebic dysentery in this Clinic, brings up two questions of vital importance along the lines of public health for the future. The questions are, first, is the disease transmitted by carriers; and second, are there sporadic cases arising in the north temperate zones?

Extensive investigations by eminent parasitologists such as Craig (1) of the U. S. Army. Fantham (2) of the British Army and others have recently added many new and important ideas to our knowledge of the life history of the entameba histolytica and the mode of spread of the parasitic infection. The vitally important question of carriers of amebic dysentery was worked out conclusively by Walker (3), who found that by feeding the encysted forms of entameba histolytica to twenty men, he was successful in infecting eighteen, four of whom developed the typical dysentery, and the other fourteen became the so-called "contact carriers" of the organism. The amebae appeared in the stools on the average about six days after the ingestion. The term, "contact carriers," has thus been applied to those carriers who have never been affected with the disease, while the term "convalescent carriers," is applied to those who have recovered from the disease but continue to expell the cysts.

Dobell (4), Dale (5), Fantham (6), Imrie (7), Inman (8), Waddell (9), and others definitely demonstrated that carriers were responsible for the continuance of diarrhea among many of the soldiers for a long time after they had returned to England. The cysts were found in the stools of the convalescents as well as in the dysentery patients. Thus it stands a settled question with substantiating proof that there are "carriers" of amebic dysentery.

Low (10) reported very completely a case of amebic abscess of the liver in a patient who had

had no symptoms since his original attack twenty years before. Libman's cases also give long quiescent periods in their histories between the original attack and the liver abscess formation. Such evidence substantiates the supposition of long latent or quiescent periods in the diseases.

In collecting cases from the north temperate zone, we find Sanford (11) of the Mayo Clinic heading the list with 819 cases, 284 of which were due to entameba coli. These, together with Dock's (12) case and those of Walsh, Libman, Tuttle (13), Patterson (14), Rosenberger (15), total about 1,038 cases, 512 of which were due to entameba coli.

Thus 500 cases with three from our own Clinic, (12), (16), (17). (18), (19), of patients residing north of 40° latitude (Philadelphia), who had never been any further south and who had never consciously been exposed, are known to have had entameba histolytica dysentery. This is proof enough that amebic dysentery is not confined to the tropics but that sporadic cases are by no means uncommon in the north. In fact Axtell reported a case of amebic dysentery contracted in the arctics of Alaska. He had a patient who had been a mate on a government boat on the Tanana and Yukon river. In this case the man is supposed to have contracted amebic dysentery by drinking swamp or surface water in the spring of the year. The patient asserted, according to Axtell, that he knew of thirteen or fourteen others with the same trouble. Careful examination with the proctoscope showed amebic ulcerations in which entameba coli were found.

To reiterate and recapitulate, we know that there are carriers of amebic dysentery, that the infection can remain latent for long periods of time and that the disease arises indigenous in the north temperate zone. May it not be possible that the entameba histolytica is an obligative parasite rather than facultative or a saprophyte? That is, the carrier, the living animal body, is the factor in the epidemiology, and that the frequent repollution of the source, whatever it may be, is necessary for the spread of the disease. Along with this is the question of how long the infection can remain in a community after the departure of the animal carrier source.

Our present cases might fall in any one of these groups. The facts in the histories are such that they can not be clearly classified, assigned or fixed epidemiologically. But one of the classes must cover them. It makes but little difference under what head we place them. No matter what the grouping, they are of importance to us now and may be more so in the future. If carriers with a latent infection, they are of especial interest, and if they are sporadic, indigenous cases, they are of just as great importance.

The present cases are the first that have been in the Clinic in two years and they entered within fourteen days of one another. They are both typical entameba histolytica dysentery cases and present many points of similarity. Both have been in Michigan for a considerable time, as I will definitely state presently. Both had been in the tropics at some time in their lives. Each had his present trouble or exacerbation begin in 1914, that is, four years ago, when in each case overwork, worry and nervousness precipitated the attacks, which have continued somewhat intermittently ever since. Both showed entamebae histolytica and trichemonas intestinalis in their stools of blood and mucus; and the blood pictures showed an eosinophilia.

The one had been in the U. S. Army for three years in the Black Mountain Expedition through New Mexico, Arizona and Utah in July and August, 1908, and then in Honolulu, Hawaii, ending in 1910, when he returned to Chicago and then to Michigan, where he has been ever since 1910. He had no intestinal disturbance while in the southern states or in Honolulu, nor did he have any until 1914 when his diarrhea suddenly came on. The question is, did he act as his own "carrier" retaining the latent cyst in his bowel for four years, or did he acquire his infection in Michigan; the former seems more rational.

The other, a Greek, had had the original attack of dysentery in Palestine in 1900. He recuperated after five months, went back to Greece and then came to this country. In 1908 he moved to Detroit where he has been for the last ten years. He had no intestinal disturbance after his original attack in 1900 until 1914 when his bloody diarrhea began. Here again the question is, did he act as his own "carrier" with the encysted organism in his bowel for fourteen years, or did he acquire his reinfection in Michigan. Here again the former seems the more rational, more so than in the first case.

The evidence is by no means conclusive, but there is quite a considerable pointing toward the long latent carrier idea in these cases. Two cases are not sufficient grounds from which to draw any conclusion. We can merely say

that the cases agree with the most recent ideas concerning the disease.

At any rate, whether carrier, latent contact or convalescent, or whether sporadic indigenous cases they should serve to put us on our guard that we may early solve the problem and prevent the maturation of a serious epidemic.

CASE 1. The first patient, Mr. P. B., age 29, a brakeman, married, American by birth, with his home at Port Huron, Michigan, since 1910, that is, for the past eight years, entered the University Hospital, May 3, 1918, complaining of a bloody diarrhea with very frequent stools, weakness and general run down condition. He had had closely intermittent and recurrent attacks of diarrhea for about three and one-half years, that is, since the summer of 1914. His family and personal history are negative. He had been in the U. S. Army and had been in the Black Mountain expedition through New Mexico, Arizona and Utah in July and August, 1908. During this expedition the water was very poor, being green "alkali" surface water with a bitter taste. He was stationed in Honolulu, Hawaii, until 1910, that is, eight years previous to his entrance. There was no dysentery during the southern expedition or in the island just at that time and there were no cases in the post hospitals. He was never in the hospital a day.

His present illness began some three and one-half years ago, late in the summer of 1914, when his bowels suddenly became "loose." At this time he was doing hard work and hurriedly eating very heavy meals. There was a certain nervous tension about the "braking" on the local freight train. This combination precipitated the attack. He had no nausea or vomiting after eating. He had about ten or twelve stools per day and each stool contained considerable blood and mucus. He had to quit work and go to bed for about ten days. Salt water injection did him very little good. He did not improve to any great degree, but went back to work anyhow. He would have fair days and bad days. One year later, in 1915, his rectum was examined and he was told that he had ulcers in the lower bowel. These ulcers were examined by the physician for amebae but none were found. Nevertheless he was given thirty hypodermic injections of emetine and was somewhat improved. The ulcers in his rectum were pronounced healed. Then about two years ago, that is, in 1916, his condition recurred, the diarrhea slowly becoming worse. He dieted without relief. He has worked right along, taking off three to four days each month in which to recuperate. At times his condition has been very severe. He has passed as high as eight stools per hour. He has always been a thin individual, nevertheless he has lost fifteen pounds in the last three and one-half years. His stools always contained blood and mucus while he was having a diarrhea. His appetite has been capricious.

The physical examination was negative except for tenderness over the splenic flexure and the descendens. Proctoscopic examination of his rectum showed no ulcers, but a redundancy of the mucous membrane (prolapsus recti) was noticed. X-ray examination showed only a hypermotility of the large bowel. The barium enema showed a descendens that was distinctly wider than normal and also considerable gas in the small bowel. The stools were watery, unformed, yellowish in color, and with some undigested food particles. There was macroscopically considerable blood and mucus. On microscopic examination swarms of trichomonas intestinalis and entamebae histolytica were found. On one occasion they were very actively motile but subsequently they were found quite sluggish. The organisms were found very motile on one occasion; they were large and on closer observation the ectoplasm and endoplasm could be differentiated, the nucleus was indistinct and many inclosed red blood cells were seen as inclusion bodies. The cells when quiescent were spherical, the ectosarc and endosarc were not so well defined, but the nucleus was more easily seen as a small refractive body with a thick capsule. The patient had septic tonsils and a pharyngitis. The urine showed a few hyalin casts but no albumin. The blood examination showed a secondary anemia. There were 4,100,000 reds, 13,800 whites and 65 per cent. hemoglobin. A differential count showed 20 per cent. small lymphocytes; 5 per cent. large lymphocytes; 62 per cent. neutrophile polymorphonuclears and 10 per cent. eosinophiles. The blood Wassermann was negative; the blood pressure was normal.

The patient was placed in bed on a liquid diet and given calomel and salts. Then emetine hydrochloride, grs. ½, was given hypodermically, one half hour before each meal. At these same times on an empty stomach, 20 grs. of ipecac in salol coated pills was administered by mouth. Thus the patient was receiving 60 grs. of ipecac per day along with 1½ grs. of emetine. On the second day after treatment was begun, the stools were free from amebae and the dose of ipecac was reduced by 5 grs. on each subsequent day. The stools were reduced to three per day and the patient felt much improved and gained three pounds in three days on a liquid diet. He was then put on a soft diet. No blood or mucus was found in the stools after the fourth day and they became quite formed in character.

CASE 2. The second patient, Mr. E. N., age 42, a Ford factory machinist, married, a Greek by birth with his home in Detroit for the past ten years, entered the University Hospital May 17, 1918, complaining of bloody diarrhea, frequent stools and loss of strength. He has had the trouble for four years, that is, since 1914, but it is worse at times. His family history is negative except that his first wife died five years ago of pulmonary tuberculosis. His personal history is negative except for incidents bearing on his present trouble. He went to Palestine about eighteen years ago, in 1900, a heavy, strong individual. Here he drank some water from a pool while he was working along a railroad. His trouble began insidiously with a gradually increasing diarrhea. His trouble lasted for about five months; he lost a great deal of weight and strength. A physician gave him some pills over an extended period and he was able to gain strength enough to return to Greece where he convalesced fairly rapidly. He never had less than five or six stools per day and frequently as many as fifteen during the attack. This gradually cleared up. He came

to America fourteen years ago, that is, in 1904, and has lived in Detroit for the past ten years, that is, since 1908.

His present exacerbation really began a little over four years ago, 1914. His wife had just died and left him with three children. He tried various worked day and night to provide for his children housekeepers but none was of any account. He and worried much over them. Then he married an Italian, who mistreated the step children. This worried the patient. Under the nervous strain his old trouble came on and he had from six to fifteen or more bloody mucous stools per day. He has never had any nausea or vomiting. He complains of a burning sensation in the rectum and anus on passing the stools. This has gradually become worse. His condition is always aggravated by taking alcoholic beverages, such as beer, wine and whiskey. He has lost about twenty-five pounds in weight in the last four years. He visited various physicians but was unable to get anything more than a temporary relief from their medication. No one else in the neighborhood is bothered with this same condition, so far as the patient knows. On entrance the patient was having six to twelve bloody mucous stools per day.

The physical examination was negative except for marked tenderness in the rectum. Proctoscopic examination showed many ulcerated areas about two inches from the anus. There was much mucus and blood in these multiple, small, round, roughly excavated spots. They were very sensitive to the touch, hyperemic and bled easily. There was some edema of the surrounding rectal wall. X-ray examination with a barium enema showed nothing except that the sigmoid and rectum were very narrow. The stools were liquid, light brown in color and contained undigested fat and meat fibers. Microscopically there was considerable blood and mucus. On microscopic examination great numbers of trichomonas intestinalis and a few entamebae histolytica were found. These latter were occasionally found to be very active, corresponding exactly with those described under case one (1).

Urine showed a few hyalin and granular casts but no albumin.

The examination of the blood showed 4,200,000 red cells, 10,700 whites and 85 per cent. hemoglobin. The differential count of 100 cells showed 26 per cent. small lymphocytes, 3 per cent. large lymphocytes, 3 per cent. large mononuclears, 55 per cent. neutrophile polymorphonuclears and 13 per cent. eosinophile polymorphonuclears. The blood Wassermann was negative; the blood pressure was normal.

The patient was placed in bed and a liquid diet given. Calomel and salts were used to cleanse the bowel. The emetine hydrochloride, grs. ½, was given hypodermically, ½ hour before each meal. At bedtime 60 grs. of ipecac were given. This was repeated the next night. The stools were reduced to two or three per day on the third day with a liquid diet. The stools on the third day were free from blood and amebae. The pain in the rectum was markedly diminished.

Treatment.—Here again, we can not offer unassailable, tried, controlled and proven, original therapeutic measures, but we can review the most recent approved methods and state our own course with the results. Rest in bed is agreed upon as important in the treatment of this condition. The quinine solution injections from 1 to 5,000 up to 1 to 500 are not used to-day as they were some years ago. (12).

An ingenious method of giving ipecac, in large doses, was devised and used in this Clinic some years ago. To prevent the nausea, caused by this drug, a duodenal tube was inserted and ipecac powder in doses as high as 120 grs. could be given through it directly into the intestines without any ill effects. (19).

Emetine hydrochloride then came into vogue and was given subcutaneously in ½ gr. doses, three times a day, until about 18 grs. had been given. Recent work by English workers has shown us that we must not pin too much faith in the efficacy of emetine hydrochloride. Dobell, (21) at the Walton Hospital, has shown conclusively in a large series of cases that, of the cases treated with emetine hydrochloride, 70 per cent. relapse; and of these, all of which are refractive to further emetine hydrochloride treatment, practically everyone responded to emetine bismuth iodide by mouth. Dale, (8) Low (10) and others reported exactly the same efficiency for the drug.

The emetine bismuth iodide is given by Dobell (21) by mouth on a full stomach in 1 gr. cachets, three times a day until 36 grs. are given.

Dale (5) gives a course of 36 grs. by giving one 3 gr. salol coated pill of emetine bismuth iodide every night for twelve consecutive nights.

Low (10) warns, in a foot note, that it is essential that the drug be given as a powder in a gelatin capsule and not in a compressed form, as he has found the "stearettes and keratin coated tabloids" passed in the feces, unchanged.

With all this evidence from reliable English sources where abundant numbers of cases have presented themselves, and where a great deal of excellent work has been done along this line, we are very much inclined to give these methods first place in our therapeutic list. Unfortunately we did not have the opportunity of giving these new measures a thorough trial.

We have had some success with our own combination régime. The patients were put to bed. The bowels were cleaned with calomel and salts and emetine hydrochloride, grs. ½, was given three times a day subcutaneously. At the same time, 60 grs. of ipecac powder in salol

coated pills were given daily as a single dose before sleeping time in one case, and in divided doses of 20 grs. before meals in the other case. The ipecac was gradually reduced by 5 grs. per day and the emetine hydrochloride was stopped after ten days. Since both of our cases were chronic with probably partly healed ulcers and pockets in the colon mucosa and wall, which would lodge cysts of the entameba and protect them from action of a drug in the circulation alone, we resorted to the combination. This method of administration was quite satisfactory; the results were apparently excellent.

We feel that the main virtue of the modern treatment lies in the attack of the organism in the bowel itself where it is lodged. The active principle of the drug when brought to the parts by the circulation is not able to reach encysted forms which are buried in scar tissue or sloughing pockets in the colonic mucosa. We have accomplished both ends by the combination; the oral administration would strike from the lumen, while the subcutaneous injections made sure that beginning metastatic foci outside the alimentary canal would not escape medication.

The use of emetine bismuth iodide is said to make the subcutaneous injections unnecessary.

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A SIMPLE AND UNUSUAL OPERATION FOR PROLAPSE OF THE RECTUM.

HAROLD DEB. BARSS, M.D.

ANN ARBOR, MICHIGAN.

(From the Surgical Clinic, University Hosptial, Ann Arbor, Michigan.)

This case is presented for your consideration to-night because in this one instance at least it suggests a possible remedy for a condition which has been rather troublesome to surgeons, prolapse of the rectum. If you consult surgical works for the treatment of this condition you will be struck with the multiplicity of procedures suggested. The very multiplicity indicates the search of the profession for a satisfactory method. For slight prolapse the cautery has been used; or a modified hemorrhoidectomy has been performed. A cuff of mucous membrane has been removed, as in the Whitehead operation for large internal hemorrhoids. Other men have advocated perineal incisions with plaiting of the rectal wall. The coccyx has been removed and the rectum drawn up and sutured to the sacrum. Intra-abdominal operations of rectal suspension or fixation have been devised. The method perhaps most successful here has been that in which from the perineum, a complete portion of the prolapsed gut is resected and the upper free edge then fastened to the anal margin.

These measures are all rather severe and many are very technical. In certain cases the patient has suffered so great a loss of blood that a major operation is almost contraindicated or if attempted is attended with considerable risk

The method which I shall portray to-night is not original, but is one which I have never seen in print. It is possible that it has been tried by many others and discarded as impracticable. I learned of it accidentally a couple of years ago in conversation with a surgeon friend of mine. The statement was made that another surgeon of his acquaintance had performed it in a number of cases with unqualified success. The method is so surprisingly simple that one is apt to discount its value for this very reason. And yet because it is simple I hold that it is worth trying. If it works, we have accomplished a desired result with the minimum of risk and discomfort to the patient, and labor for the surgeon. If it fails, no harm has been done, and we have at all events given it the benefit of a trial.

CASE. W. W., age 54, registered at the University Hospital on November 27, 1917. His complaint was a severe diarrhea with blood and pus in the stool. The past history is not significant. The present trouble began in April, 1917, when he noticed a bearing down sensation in the rectum and soon there occurred a slight eversion of the mucosa. In the early summer a diarrhea developed which grew steadily worse until he began to have an evacuation every hour or two during the day and two or three times at night. There was bleeding and a mucopurulent discharge with the stool. Proctoscopic examination showed a very relaxed sphincter with hyperemia and ulceration of a very redundant mucosa. No prolapse developed at this examination. The patient was examined in the Medical Clinic for several days but no cause could be found for the diarrhea other than the hemorrhoids. He was then transferred for operation of the rectal condition. The hemoglobin was low. The patient had been losing weight. The blood pressure was 115. It seemed unwise to attempt any very radical operation on this man and yet something had to be done to stop this severe diarrhea and hemorrhage. On December 17, 1917, the patient was operated upon in the Surgical Clinic. When under the anesthetic, the prolapse appeared and was found to be about three inches in length. The patient's condition did not warrant a protracted operation and it was decided to perform the following ridiculously simple one. The prolapse was replaced and then small puncture incisions were made about half an inch from the anal margin—one anteriorly, one posteriorly, and one on each side. Through these small cuts scissors were introduced and blunt dissection was conducted beneath the skin so as to connect each puncture, and thus make a complete subcutaneous ring around the anus. Through the anterior puncture silver wire (gauge 19) was threaded on each side, the two ends appearing through the posterior cut. The wire was then drawn up and twisted so as to contract the anal opening to a size which would just admit freely the index finger. The ends were then twisted, the excess wire was cut and the ends were tucked beneath the skin. The punctures were so small that sutures were not needed. The wire was completely buried. A sterile pad was the only dressing applied.

Mr. W. was kept in bed on liquid diet for about ten days. For two days after the operation he had no bowel movement. Then three and again two. Following this there were several days without any defecation. After ten days he was given a diet with solid food and allowed to be about in a wheel chair. Then he began to have regular movements, averaging two to four a day, sometimes more and at times less. Chalk was administered in an attempt to decrease the diarrhea and it seemed to help. The patient was discharged five weeks after the operation. When discharged he was averaging one and two stools a day. There was no blood and less pus. The patient felt better and began to gain in weight. The prolapse did not re-appear.

Four months after his operation I wrote to the patient to learn of his condition. He wrote that he was improved in health as a result of the operation; the rectum had not protruded, and that he only had a diarrhea occasionally. There is a mucous discharge so that he still requires a pad. This is not surprising when we know how refractory colitis is.

This, then, is the operation and this the result in the one case in which I have seen it tried. I realize that one can not draw conclusions from a single case. I am not yet ready to say that it is surely of value, but I do believe that certain features are of worth. If it should prove in this and other cases to secure a lasting cure, it is eminently worth while, for it is so simple and without risk. It can be performed under local anesthetic if desired; and the whole operation will take but ten minutes.

Should it prove to be but temporary in the relief it affords, I still feel that it is worth a trial, for it is undoubtedly of value in securing a temporary reduction of the prolapse. Then the physician can treat with better hopes of success the ulcerative colitis and the attendant bloody dysentery. Then when the health and strength of the patient has been improved to the point where he can undertake a radical operation with a minimum of risk, it can be conducted with the maximum assurance of success.

This procedure is new, it is simple, it is untried. I submit it for your consideration as of possible value. I would like to learn the experience of others so that it may be adopted as of value or if necessary, thrown into the discard.

THE PRODUCTION OF CHRONIC NEPHRITIS THROUGH FEEDING HIGH PROTEIN DIETS.

A PRELIMINARY NOTE.

L. H. NEWBURGH, M.D.

ANN ARBOR, MICHIGAN.

(From the Medical Clinic, University Hospital, Ann Arbor, Michigan.)

The investigations which I am conducting aim to discover the usual cause of chronic nephritis. The kidney's biggest task is presumably the elimination of nitrogenous waste. Might not an excessive effort in this direction sufficiently prolonged end in a scar?

Rabbits fed an exclusive diet of coagulated egg white show albuminuria within three days and casts after a week.

Rabbits may be maintained on soy beans as the sole food for many months. This furnishes a diet containing 40 per cent. protein. Such animals show albuminuria and urinary casts after four or five weeks. The blood urea averages 100 mg. per 100 cc. blood. The kidneys of rabbits that have lived on soy beans for five or six months, present clear evidence of a progressive subacute or chronic nephritis. In addition to the epithelial injury and congestion, there is a diffuse, extensive increase in connective tissue.

More Misbranded Nostrums.—The following nostrums have been proceeded against under the Federal Food and Drugs Act: Baker's Tubercular Remedy, containing 11 per cent. alcohol by volume, sugars, potassium iodid, ammonium chlorid, glycerin, licorice, plant extractives, etc. Lee's Save the Baby Croup Specific, a liniment with a fatty oil base containing camphor, rosemary and thyme. Lee's Croup Mixture, containing over 70 per cent. of lard, about 7 per cent. alcohol, and over 18 per cent. volatile oils, consisting of a mixture of oils of rosemary and thyme and camphor. Twentieth Century, consisting of a powder and solution, the latter, essentially a mixture of water, glycerin, lead and zinc sulphates, acetates, nitrates, and a small quantity of perfume. Moreau's Soothing Wine of Anise, a syrup containing morphin acetate and alcohol, and flavored with anise. Professor C. E. Matthai's Victory, containing 49 per cent. alcohol, 1.2 grains of opium to the fluidounce, and 3.5 per cent. camphor and volatile oil, and small amounts of red pepper. Sensapersa, tablets containing asafetida, cannabis indica, and a drug containing a mydriatic alkaloid (*Jour. A.M.A.*, Nov. 9, 1918, p. 1601).

The following "Patent Medicines" have been declared misbranded under the U. S. Food and Drugs Act, and a "Notice of Judgment" giving an account of the prosecutions issued by the U. S. Department of Agriculture for each: Jacobs' Liver Salt, an effervescent preparation consisting largely of sodium phosphate, sodium sulphate, and sodium chlorid. Lydia Pinkham's Vegetable Compound, containing 17.9 per cent. alcohol, and 0.56 gm. of solids to each 100 c. c., with vegetable extractive material present. Maguire's Extract of Benne Plant and Catechu Compound, containing over 39 per cent. of alcohol and 1-10 grain of morphin to each fluidounce, besides camphor, catechu and peppermint. Hood's Sarsaparilla, a mixture of alcohol and water, containing about 0.9 per cent. of potassium iodid with sugar, vegetable extractives, which give indications of the presence of sarsaparilla, licorice, and a laxative drug resembling senna. Booth's Hyomei Dri-Ayr, consisting essentially of oil of eucalyptus, together with a small amount of resin-like solids and a mineral oil and a little alcohol. Hill's Kidney Kaskara Tablets, an iron oxid, sugar-coated tablet carrying emodin, caffein, acid resin, magnesium carbonate and talcum. Hancock Sulphur Compound, a calcium sulphid solution. Hancock Sulphur Compound Ointment, a petrolatum ointment containing sulphur, ash (chiefly lime) and phenol. Palmer's Skin Whitener, containing ammoniated mercury, mixed with a fatty base. Grossman's Specific Mixture, a balsam copaiba mixture (*Jour. A.M.A.*, Nov. 16, 1918, p. 1681).

Autolysin and Beer.—Henry Smith Williams, who exploits "Proteal Therapy," also runs a publishing concern, the Goodhue Company, and has associated with him his brother, Edward Huntington Williams. Some time ago, complimentary copies of a book, "Alcohol, Hygiene and Legislation," written by Edward Huntington Williams, and published by the Goodhue Company were sent broadcast to physicians with the compliments of author and publisher. The book championed the lighter alcoholic beverages and questioned the value of prohibition. Enclosed with the book was an advertising leaflet on the "Autolysin" cancer cure and a letter calling attention to a book by Henry Smith Williams on the Autolysin Treatment of Cancer. Now the secretary of United States Brewers' Association has testified before a Senate Committee, according to newspaper reports, that a "Dr. Edward H. Williams" was employed to write articles "relating to the brewers' trade." Is the Dr. Edward Huntington Williams who wrote "Alcohol, Hygiene and Legislation" the "Dr. Edward H. Williams" who was employed by the brewers to write propaganda favorable to the brewing interests? Was the cloth-bound book, "Alcohol, Hygiene and Legislation," paid for, wholly or in part, by the United States Brewers' Association (*Jour. A.M.A.*, Nov. 30, 1918, p. 1846)?

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E. W. Toles .....Lansing
R. S. Buckland .....Baraga

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January

Editorials

TO THE COUNCILORS OF THE MICHIGAN STATE MEDICAL SOCIETY:

Dear Doctor:

The Medical Profession of Michigan responded most loyally to the call of our Country for volunteers. Hundreds of them are absent in the service but it is hoped that ere long very many may be returning to take their old places at home.

When they departed, we as a Society promised them that their home interests would be protected and their places kept. The time is soon coming when we must make good these promises. This can not be done without a complete and harmonious organization in each county of Michigan.

Owing to the absence of these men, and to the extra stress and strain of war times, upon the physicians remaining at home, many of our county societies have failed to have meetings and are now run down and unorganized. These conditions must not be allowed to continue. The work of reconstruction of organized medical forces in Michigan is upon us and our duty is plain.

I am now asking you as Councilor to immediately get in touch with each county society in your district, pull it together, see that elections are held and that 1919 starts off with every society and every member full of enthusiasm and days of hard work, so that when our absent members return they will have something to return to that is worth while, and that can and will make good the promises that we as organizations made to them when they went out to work and fight for us.

We shall hope and expect to have a good report from you of the organizational work done in your district, at the next meeting of the Council to be held in Detroit the latter part of January.

Get busy and you will have a Happy New Year—happy in the knowledge of duty well done.

Sincerely and fraternally yours,
ARTHUR M. HUME.

COUNCIL MEETING.

The regular annual meeting of the Council of the Michigan State Medical Society will be held at the Hotel Fort Shelby in Detroit on Tuesday, January 7th, at 9 a. m.

Signed, W. J. KAY, Chairman.

DUES.

The 1919 Society dues become payable January 1st. After April 1st, members whose dues have not been paid will be placed upon the suspended list.

Just at this time every one is busy, and the county secretaries are burdened with many duties demanding much of their time. So do not add to their burdens by causing them to take active steps to collect your dues. Send in your check now, lest you forget, and thereby lighten your secretary's work.

COMPULSORY HEALTH INSURANCE.

(D. Emmett Welsh.)

At the annual banquet of the Kent County Medical Society held at the Pantlind Hotel on March 22, 1916, Mr. F. Campau of the Manufacturers' Association read an extended article on the formation of a plan of insurance to be known as the Compulsory Health Insur-

ance. The benefits to be derived by the employer and the employee, and the greater efficiency of labor to the employee, and in turn the benefits that labor and its dependents would receive, and the important role physicians would play in its organization were fully dealt with. We were informed that different states had already made efforts in this direction, and that others were now so doing. Of the states in which effort was being made were Massachusetts, New York, Illinois, and California, and stress laid upon California on account of the governing influence in that direction. Eventually legislation would be demanded in this State and the physician would accept the same as it was bound to come. Soon thereafter it was noticed that our medical journals took up this subject and comments made upon the same, for and against it, filled their pages.

On April 17, 1917, this Society was favored by an address by Doctor Rubinow of New York upon this same subject and much useful information was obtained. We were informed that this was a purely philanthropic movement developed by some New York people to assist in the alleviation of the suffering of the working people. The strong appeal made for the poor working man, his unhealthful condition, his low wage, his insanitary surrounding which diminished his earning power for which health was so vital that a co-operation of the profession was deemed primarily essential for this work.

Our statute books have laws to cover almost every form of insurance, industrial, accident, health, invalidity and old age insurance; pensions for widows and orphans; trade unions, national and local; employer's organizations for benefit of employees; mutual societies, fraternal orders, local lodges, commercial companies operating for profits or on mutual principles, etc. The pros and cons of insurance present so many varying angles that the point of vital interest is the Compulsory Health Insurance to the physician is the angle to be viewed.

Social Insurance first developed in Germany and was put in form in 1883. Later other European governments adopted some form but in none of the plans has more gratuity been offered than that proposed by this Compulsory Health Insurance. These foreign countries are now in the throes of the resultant conditions from the above form of insurance. All political economists consider the health of an individual as the prime factor in economic welfare. This plan of Compulsory Health Insurance must have originated in the gray matter of a conference of economic theorists.

The plan outlined for Compulsory Health Insurance is as follows:

The expense is to be defrayed by the employer, employee, and the State. The employer pays 40 per cent., the employee pays 40 per cent., and the State pays 20 per cent. The insured obtains cash benefits of two-thirds of his wage for twenty-six consecutive weeks if his earning wage is $100.00 or less per month. He obtains free medical and surgical service, free medical and surgical supplies, free nursing attendance, funeral benefits, free dental work, maturity benefits, free medical and surgical attendance for dependents, and free medical and surgical supplies for dependents.

It occurred to the writer that there were other factors lying dormant for which this move was being made, and that the speaker was the forerunner for this propagandic socialistic work. To gain an idea of this purport the following interview took place:

How was the employer to obtain this?

By contract with the physician or a group of physicians, and the contracts were to be given to the lowest bidders.

Who was to decide the bidding?

A commission appointed by the Governor.

What constituted that committee?

Five members should constitute the committee.

Is the commission's work like your own work to be philanthropic?

No, they should devote their whole time to the work and should receive $5,000.00 or $6,000.00 per year.

I do not suppose Doctor Rubinow, that you would travel around the country out of pure philanthropy for the working man?

No, I am paid by these philanthropic people.

I suppose you receive at least $6,000.00 for your work?

I would not do practice and do night work for that amount.

I might add here that this would cause an enormous expense in carrying on thir beautiful philanthropy. Its primal aim which is now held up prominently would be pushed into the backgrounds, and its commercialism would be predominate and the individual would lose his identity and be unable to throw off the yoke of serfdom. It is the border line of radical socialism, a glaring attemptor in the destruction of medicine, a lowering of our standards, a re-

gression in our progress, a travesty on its science, a lowering of its morals and the high mortality rate among this class of people it intended to protect would be appalling, due to the inefficiency of the donor.

Doctor Rubinow said there was no doubt California would pass such a law. I wired the San Francisco Examiner and in answer was informed that it had failed to pass by a vote of three to one. The rural districts would not be affected but the industrial centers would be severely affected. In Grand Rapids 70 per cent. at least would come under this law. What of the balance? What of the doctors who are not successful in their bidding? The incentive to study is increased by remuneration, and this applies to all kinds of trade. If all were satisfied with their little spheres, with no incentive to advance, we would become easy prey to decay of mind and body as the life of an organ is its use.

Let us analyze some of the work. I have been informed that one of the industrial surgeons had nearly five hundred accident cases alone during the past year. We can all form some idea of what amount of work this would entail. A married man with family according to the census enumerator is recorded as having four in the family. A factory employing a thousand men and allowing 500 of them to be single and 500 married would leave an attendance upon 2,500 people. An attendance of one visit annually upon them would mean 2,500 visits per year of 200 per month or practically seventeen visits per day. If we allow twenty minutes for each house call for examination and investigation, and that is a reasonably short time at the bedside, and fifteen minutes to go from house to house would require over eight hours of solid work. Then your office hours must be reckoned and for this alone one man would have to be on the job all the time. For this you must compete either singly or in group form. Your remuneration would be based on a ratio of the floor superintendent of an eight hour per working day. Your fee bill would be 25 or 50c per visit, office visits 25c, maternity cases about $5.00. What would that mean? When an employee is compelled by such a plan to seek the services of a physician he does not want, your work is a failure. You lose your identity and individuality. You will be hampered by complaints of the foremen, bosses and workmen. You will be harassed by complaints that do not exist. Your services must be rendered as it is obtained for nothing. The malinger and sympathy seeker will be your steady office occupants, in fact you are nothing.

Compulsory Health Insurance is a vicious propaganda, a detriment to the profession, an economic disadvantage dividing society into a self supporting and contributory class on the one hand and a dependency upon the other.

COMMENTS.

Mr. J. S. Rowe, President, International Association C. & S. Underwriters says: Since it has been demonstrated that established insurance companies, subject to examination and regulation by State Insurance Departments, are better qualified financially and otherwise to act as administrators of compensation benefits, and to furnish efficient inspections for accident prevention, than is a politically-managed State fund, we feel that the open antagonism of labor organizations against insurance companies is due to lack of information and misapprehension on the part of the more sincere and intelligent labor leaders. In our opinion, the continued urging of exclusive State insurance schemes in resolutions adopted by labor conventions is being inspired solely by the professional politicians, who are making use of the so-called labor vote for the advancement of their own political fortunes.

Commissioner Cleary of Wisconsin says: The subject of social or welfare insurance is still a subject of much interest. It is now being considered by commissions in a number of states. The events of the past year have further convinced America that much that was commended in the German system has been thrown into greater relief, and, instead of its plan being a part of a great humanitarian policy, it was in reality a part of the scheme of militaristic and autocratic rule that has involved the world in its present deplorable condition.

Mr. John Sullivan of the Modern Woodmen of America in an article published in the National Underwriter says that "Social Insurance in principle, stripped of all fancy verbiage, says to the citizens having incomes below a fixed amount that they shall be in a class which the government will dictate to arbitrarily as to how they shall spend them, thus making these people wards of the government to whom contributions by other citizens shall be made. In other words the inference is that people below this dead line are incapable of managing their private affairs."

"The conditions of ill health and its causative factors can be best met by the medical profession. It is folly for economists to attempt to formulate acts to meet conditions with which they have the merest surface acquaintance. It is just as foolish for national or State medical societies to attempt to co-operate with groups of economists or labor leaders accepting as a foundation for their edifice the theories of those partially informed groups. Social insurance is too far-reaching in its influences and possibilities for harm to be applied to a great state for the purpose of proving or disapproving the theories of a group of men who merely expect that they can apply European methods to American conditions." By Henry L. Winter, M.D., Chairman of the N. Y. Medical Society Committee on Medical Economics, published in the May Journal of the Society.

From the Maine Medical Journal.

As physicians under the proposed law would get no more than $2,000 a year, and many less, no well qualified men would take office. Nor should the laboring classes be thus imposed upon, by insuring them at a sum which would, on the whole, be much more yearly than they now pay for good medical services. Many corporations are now paying for the services of good physicians and skilled trained nurses, and to throw them all out of employment by any health insurance law would cause worse conditions of health than now prevail.

From the Journal of Commerce.

Never was the danger more serious of a further spread of socialistic doctrines, favorable to the worst form of paternalism and opposed to American conceptions of democracy and liberty, than at the present time. Perhaps the best concrete illustration of this menacing tendency towards paternalism and autocracy is the preposterous proposal for the establishment of compulsory health insurance, practically in precise conformity to the principles and methods of the German system inaugurated primarily as an assumed safeguard against the growing power of the Social Democratic party. The underlying reason for the propaganda in this country is not the needs of the people, but the needs of the propagandists themselves for self aggrandizement, for employment, for power and for opportunities to spread socialistic doctrines in any and every direction.

In an article from the National Underwriter Commissioner M. J. Cleary of Wisconsin says that a group of visionaries are endeavoring to take advantage of the war situation and establish Compulsory Health Insurance, and that these people are now busy advancing the idea that many of the steps that have been taken as useful and necessary war measures are fixed and permanent policies of government.

From the National Underwriter.

State social insurance is paternal, socialistic and distinctly pro-German in character. Its workings are well illustrated by the thorough and complete enslavement of the German people through State insurance.

Mr. Edward F. McCrady, secretary of the Boston Central Labor Union, in an address said that he represented an organization of 82,000 workers which is opposed to compulsory health insurance. He said that this proposal to compel people to do something that they did not want to do was not American and was not in accord with our ideas of democracy.

Doctor Edward Ochsner, an eminent Chicago surgeon, at a meeting of the Vermillion County Medical Society at Danville, Illinois, in an address said: "If Compulsory Health Insurance is introduced into this country, autocracy will gain a firm foothold in the land of the free. It may come in the guise of democracy, but it will be autocracy nevertheless. My observation and experience in Europe, my study of monarchies and my life in this free country, have given me a passion for democracy—and my ideas on this question were fixed long before the war. The Germans are a great people—but not as great as in the days of Goethe, Schiller and Heine. Autocracy has produced mass efficiency at the cost of self-reliance, individualism and independence and in the terrific struggle in which the nations of the earth are now engaged, autocracy and mass efficiency must and will be crushed in order that democracy, individualism and independence may not perish.

Mr. Edson S. Lott said in an address before the American Association for the Advancement of Science that Compulsory Health Insurance was the newest advertisement of the reformer for revenue only, the latest device of some politicians to shine as philanthropists—while some one else pays for the lustre; both of whom are being aided by certain eminently respectable and altogether praiseworthy citizens.

From the Official Bulletin of the Chicago Medical Society.

Unsolicited and objectionable to those most interested. While organized labor, the employer of labor, the taxpayer, and the physician are

the ones most vitally interested in Compulsory Health Insurance, it is interesting to know that all these interests are unequivocally opposed to it.

The demand for this legislation has not come from representatives of labor, whether organized or not, but chiefly from those who are not the representatives of wage earners' interests. It is extremely significant that this movement, which primarily concerns wage earners and their dependents, should be strongly opposed by the American Federation of Labor.

We will show that the employer of labor, the taxpayer and the physician should oppose this measure.

Will Extend Medical Charity Abuse.

While it is claimed by its advocates that it will solve the question of the abuse of medical charity, on the contrary, we will be jumping out of the frying-pan into the fire, for it will substitute a worse form of abuse than the one we are trying to rid ourselves of.

Profession's Income Affected.

The point is made by the advocates of health insurance that the income of panel physicians will be increased. That is true, but it will be the least efficient doctors who will make the most money, and from the standpoint of the people, the service will be much deteriorated.

Destroy Personal Relationship Between Patient and Physician.

It would bring about compulsory medical attendance and do away with that personal and confidential relationship between doctor and patient, taking from the sick one that confidence, trust, and friendship which is such an important factor in the proper treatment of disease. It is this element which makes the practice of medicine a profession and not a business. It is not wholly the dose of medicine that cures the patient, but success is frequently in a considerable measure due to the confidence the patient has in the family physician. This feeling of confidence, trust and personal relationship between doctor and patient so essential in promoting restoration to health should not and must not be disturbed by legislation.

Villard says: "One of the saddest things to note since the adoption of the German social insurance is the change in the relationship existing between doctors and their workingmen patients."

Un-American and Subversive of American Ideals of Democratic Government.

The entire agitation is artificial and ill-advised. It is a scheme of paternalistic government of the rankest kind and antagonistic to the spirit of American institutions and the ideals of our democratic form of government.

The American people are not willing to change from individualists to paternalists.

Compulsory sickness insurance for workers is based upon the theory that they are unable to look after their own interests, and the State must interpose its authority and wisdom and assume the relationship of parent and guardian. There is something in the very suggestion of their relationship and this policy that is repugnant to free-born citizens, because it is at variance with our concepts of voluntary institutions and individual freedom.

To compel a citizen, against his will, to enter into an insurance contract and impose upon him the burden of paying the premium, in whole or in part, is un-American and dangerous to civil liberty.

A MAD WORLD.

Fear is the most prolific source of all evil. Of course, if fear were understood in its full metaphysical significance, it would be understood to be the provoking cause of all evil of every sort. But even from the ordinary point of view of the world, fear, when it communicates itself to numbers, is capable of causing greater disaster than any other phase of the human consciousness. The pagan philosophers realized that there was such a thing as the fear of fear; in other words, as they stated it, the fear of death was worse than death itself. Centuries later Shakespeare appropriated the idea, and put precisely the same sentiment into the mouth of Isabella, in "Measure for Measure," and, indeed, anyone who knows anything at all of history knows how disease was spread upon the wings of fear in the case of that awful visitation of the Fourteenth Century known as the Black Death, and again when a pestilence of a similar nature swept London, in the Seventeenth Century.

Some day the world will come to see that what it calls contagion is a mental contagion, and that what it calls infection is the infection of one mind from another. Orthodox medical practice today largely recognizes this, but it draws back from the logical consequences of its own admission, and endeavors to shelter itself in a half-way-house, which is

built partially out of mind and partially out of matter. Any person who has watched the ravages of such a disease as cholera in the East must know exactly what this means. The European sahib, going about doing his duty, and quite fearless of consequences, moves through the cholera camps with perfect immunity from the disease. But the native, stricken by this disease, lies down almost where he is overcome by it, whether in his house or by the roadside, convinced, in the suddenness of the shock and confusion of his fear, that the moment has come from which it is useless for him to attempt to escape.

In such conditions it is surely obvious that the sanest treatment is to do everything possible to destroy fear. Fear in a Christian community should be self condemned. Some nineteen centuries of reading the Johannine epistles should surely have effected this if Christendom is understanding what it reads. It is little to the point to say that fear is uncontrollable, for any person who has ever had anything to do with causes which produce fear knows that this is not the case. Probably every man who has made the sea his profession has been through periods of fear which he has had to overcome in order to gain that sereneness in danger, without which he would be a liability instead of an asset on board his ship.

Practically every man who has ever been into action on land can tell you something of the sickening sensations of the first experience of battle. But as time goes on the veteran rises superior to the fears of the recruit, and daily takes his life in his hands with a calmness which shows that he has learned something at any rate of the dominion over fear. It is surely obvious, then, that in an hour of great fear, when the prevailing tone of the human mind, in the midst of the conflict of Armageddon, finds expression in an epidemic, that a Christian country should rather resort to its churches to relieve itself of its fears than close their doors so as to sound the top note of human agony in a belief that God's hand is so shortened that it can not save.

Let any person who has been brought in contact with the conditions of to-day ask himself frankly whether it is not fear which is playing such fearful havoc in the world. Everywhere men and women are afraid. Afraid in the areas of war of a storm blast that may at any moment strike over them; afraid within the orbit of the air squadrons, of the sound of the terrible engines whirring in the darkness overhead, and of hearing the bombs explode all round; boys sleeping fearfully in the trenches, waiting for the summons in the gray morning to go over the top, and men and women sleeping in towns and villages, miles and thousands of miles away, fearful of what in that very moment may be happening to those whom they love; men and women at sea, waiting, as it were, for the explosion of torpedoes; or even men and women in immediate physical safety, wondering what effect the war is going to have on their incomes and their lives. A great fear has stricken the world, and it is little wonder if out of this fear there have emerged pestilences and diseases which have mounted on the winds of fear and scattered their seeds in every direction.

In such circumstances what would it be expected that a Christian community should do? Would it not, remembering the words of the Bible, that "perfect love casteth out fear," be to ask itself if there were not something amiss with its understanding of love which makes love powerless to overcome fear? And should it not naturally fling wider open the doors of its churches, confident that in doing right, by worshipping God, no ill could touch it? Have Christian countries so completely come to distrust the doctrines they profess, that the 91st Psalm is no longer a protection against fear and against disease, against pestilence and against war:—"He that dwelleth in the secret place of the Most High shall abide under the shadow of the Almighty. * * * There shall no evil befall thee, neither shall any plague come nigh thy dwelling." Yet, at the very moment when the churches should be filling the minds of the people with peace, and reassuring them of the impotency of evil, it is proposed that these churches shall be shut, and that the admission shall be made that it is dangerous for men and women to congregate to worship God, for fear the Lord's arm is so shortened that He can not contend with microbes. On the other hand, if people believe that God sends pestilence into the world, for the good of the world, what right have they to protect themselves against this pestilence, and to attempt by the drinking of drugs, by methods of segregation, or by any means at all, to prevent the anger of the Lord from taking effect. The very fact that all men and women endeavor to protect themselves against disease, at all times, is the proof, to any sane person, that in its heart the world does not believe that discord proceeds from Principle, that death comes out of Life, or that reprisals are the work of Love.

"The way," writes Mrs. Eddy, in a famous sentence on page 201 of Science and Health, "to extract error from mortal mind is to pour in truth through flood-tides of Love." Now not even the natural scientist will deny that the way to overcome any condition at all is to learn the truth about it. Until the truth has been learned a man fights with his hands tied behind him, or at the best like the boxer in the Greek games, who, Paul declared, beat the air. The Christian religion is perfectly clear on this point. Jesus of Nazareth himself declared, "Ye shall know the truth, and the truth shall make you free." If the truth will not free men from microbes, it will not free them for anything at all. Now it is perfectly certain that if the truth about Christianity exists anywhere, it exists in the Bible, and that one way to learn this truth is through the churches consecrated for the purpose of promulgating it, and not by closing their doors in token of their impotency. The church which closes its doors practically proclaims its impotency, and the admission is a terrible one when it is made in the hour of a nation's need. If the arm of the Lord is so shortened that He can not save, what is the good of the siren whistles to call people to prayer every day at midday? Is it to be supposed that the prayers for the success of Truth in the war will be more successful than the prayers in the churches for freedom from influenza? Let the siren shriek on week days, but the churches be closed on Sundays. Surely it was a wise man who once said, "A mad world, my masters!"

The above editorial from The Christian Science Monitor of October 8, is published by the Christian Scientists in order to help stem the tide of fear, which is the most serious factor in perpetuating the present epidemic. It is hoped that by recalling to the community the power of Christian prayer to stop the ravages of disease, the necessity of opening churches will be seen, and that their opening be demanded, thus proving that the facts do not belie the statement upon the coinage of the Nation: "In God We Trust."

"A MAD WORLD" MADE MORE MAD.

(By the Rev. Alfred W. Wishart.)

The Christian Science full page advertisement entitled "A Mad World" is as dangerous to the world's sanity as the microbes it ridicules are to the world's health.

It is an attack upon health laws and sanitary regulations which will encourage the ignorance and superstition which have immensely afflicted mankind and which have impeded progress in mastering disease. It is a religious invitation to disregard health laws which should not pass unchallenged.

If Christian Science could induce the American people to give up doctors, close hospitals, repeal health laws and abandon their belief in small-pox, scarlet fever, diphtheria, influenza, typhoid, yellow fever and other diseases, it would do more damage than Germany could ever do. The medical department of the army and navy has accomplished marvels in keeping men well and in fighting disease. For one, I can not keep silent when this uphill struggle is represented as a silly fight against something that doesn't exist.

If beliefs in and fear of disease are causes of disease, why is this country not afflicted just now with yellow fever or smallpox or cholera instead of influenza, since we believe in all these diseases and fear them too, quite as much as influenza?

How does it happen that it is just now an influenza epidemic, since people were not thinking or fearing influenza when the epidemic started?

We believe in the reality of the grip as much in the years we were free of it as in the years of epidemics. Why did the epidemic of grip ever cease?

The advertisement says: "Now not even the natural scientist will deny that the way to overcome any condition at all, is to learn the truth about it. * * * Jesus of Nazareth himself declared, 'Ye shall know the truth and the truth shall make you free.' If the truth will not free men from microbes it will not free them from anything at all."

It would be discourteous, perhaps, to call this nonsense, so let us characterize it as illogical.

In the first place, "truth" and "free" are terms undefined. What kind of truth and freedom was Jesus talking about? There is the truth about stars, mathematics, microbes, a pair of shoes and man's relation to the Eternal. There is physical freedom, moral freedom and intellectual freedom. One might be free in dealing with geometry and a moral slave, while another might be an ignorant slave in geometry and morally free.

Consider the logic of the quotation. If we knew the truth about microbes, we would be free. Fear is the cause of disease. There are

no microbes, therefore the unafraid will not have the grip. Or perhaps, this was intended: The real truth about microbes is that they exist, but if you are not afraid of them, you will never have the grip.

Now, what is the truth about the grip or any germ disease? Are there or are there not, germs? Will the Bible answer that question? Was the truth Jesus meant the truth of microbes? If not, what right have we to use the authority of Jesus against the germ theory?

Again, granting that the truth about microbes will free men, waiving the question what that means, what is the truth about microbes? The Christian Scientists say they are either caused by fear or fear will free us from them. Their statement in the advertisement is not quite clear on that point.

It all amounts to this: that the absence of fear will prevent the grip or cure the grip. If it can do one it should the other. Here is unadulterated religious dogmastism asserting itself against the medical science of the world. The germ theory of disease is as firmly established as the principles of mathematics. To encourage people to disregard it is to endanger public health.

A bullet may kill a soldier whether he fears or not. What is the difference between bullets and microbes? Is not one as real and as deadly as the other? In fact, more die from microbes than bullets.

If Christian Scientists came out frankly and boldly and denied that bullets can kill, they would be consistent, but all the rest of the world would perceive the absurdity of their teaching. When they attack the germ theory of disease or deny that men are slain by microbes apart from fear, many are misled. None but relatively few scientific men have ever seen microbes or know anything about them. In all probability there is not a Christian Scientist in this city who has ever looked at a microbe through a microscope or who has ever given the germ theory or disease scientific study.

"The way to extract error from mortal mind is to pour in truth through the flood-tides of love." This quotation from Mrs. Eddy is about as much help to us in understanding influenza as "Science and Health" would be to a man falling 10,000 feet from an airplane.

Doctors make mistakes and people die in hospitals, for we are still in much ignorance concerning disease. There is bound to come a time when all human help fails, even "Science and Health" will not avail to keep Christian Scientists living on forever on this earth. But medical ignorance or blunders and the fact that a mind free from fear is of great value do not justify us in going to the other extreme by antagonizing public health regulations, throwing overboard the discoveries of medical science and attributing epidemics to fear.

Nobody with ordinary intelligence denies that freedom from fear on sea or on land, in the war zone where air raids occur or in the trenches under bombardment, is a great help. Neither is it denied that even in epidemics there should be no fear. Calmness and confidence are always desirable and useful in controlling disease. But the Christian Scientist makes use of these commonplace facts to support his dangerous religious theory of disease. He opposes proper precautions against disease. If his theory should prevail, this country would be swept by plagues and epidemics from one end to the other. If he is right, the battle against tuberculosis and venereal diseases is an irreligious recognition of evils that do not exist.

The seriousness of this assault upon established truth concerning disease may not be clearly recognized by many people. Undoubtedly it is provoked by the fact that Christian Scientists are compelled to obey health regulations the same as other people. Their hostility to medical science comes out sharply and clearly in an epidemic, but that same hostility is at work all the time in their propaganda against modern theories and treatment of disease.

The main question is not whether it was wise or unwise, necessary or unnecessary to close the churches. Back of all questions concerning the police powers of the State and of the value of any particular device to stay the ravages of disease is the primary issue raised by Christian Science.

Shall we look to the Christian Science church, the bible and "Science and Health" for our theory of disease and our protection against it, or shall we depend upon medical science? That is the real issue. That faith, prayer and a life regulated by certain lofty religious principles will promote health and restrict the ravages of disease in general needs no argument. We accept that view without question. But that biblical truth will teach us the nature of diseases or tell us how to combat them we most emphatically deny. There are a lot of unhealthy saints and more healthy sinners in this old world of ours.

If we abandoned all medical knowledge and

ceased all scientific efforts to cure or to prevent disease, we would soon be back to the physical conditions of the Middle Ages, or worse.

The only thing that saves Christian Scientists themselves in many cases from the afflictions of disease is the fact that they live in the light of advanced knowledge and under the protection of many laws and devices which promote good health. While their theory of disease takes them back to those times of ignorance at which God is said to have winked, they are spared intellectual retrogression at other points because they have incorporated into their teaching some of the truths respecting the relation of mental states to disease, discovered in modern times.

Their truths are the common property of all intelligent people. Their emphasis on these truths has no doubt been of great value to many, for which they are to be given all due credit. But all the good they have accomplished is no proof of the soundness of their theory of disease and, what is just now the issue, no justification for a propaganda against sanity in the treatment of devastating epidemics.

MICHIGAN'S PLAN FOR THE SUPPRESSION OF VENEREAL DISEASES.

(Under direction of the Michigan State Board of Health, Lansing, Michigan.)

Up to the time that the draft boards presented their unanswerable figures, it was not the custom for state health departments to concern themselves very deeply with the question of venereal disease. Combating "the social evil" was left, by common consent, to the various commendable, but inadequately financed, societies organized especially for that purpose. What the doctors knew, they were compelled to keep to themselves. And the average layman, schooled in the ancient art of shutting his eyes and ears at the slightest hint of sex, dreamed on.

The first draft sounded the reveille. Thanks to a wide-awake Governor and War Board, who furnished the necessary funds, Michigan was one of the first of the states to respond, and her subsequent record has maintained the reputation. Approximately a year has passed since the State Board of Health was empowered by the War Preparedness Board to put into operation a plan for venereal disease control. In November, 1917, syphilis and gonorrhea were declared to be dangerous communicable diseases, thus bringing them under the law requiring reporting and quarantine. A brief resume of the development of the plan of campaign follows.

Patent Sex Remedies.—One of the first steps was to ask the co-operation of the pharmacists of the State to prevent counter prescribing for venereal disease. The State Pharmaceutical Association and the Rexall Association, comprising about ninety per cent. of the pharmacists in Michigan, met in joint session and pledged full support. The result is that the better drug stores refer customers to physicians instead of offering a patent medicine.

Reporting.—Physicians are given the choice of reporting by number, initial or name. In view of the fact that reporting syphilis and gonorrhea is an innovation, the response has been good, but there is still room for improvement. The reporting is obviously an important part of the whole plan and much depends upon its thoroughness. The records are kept absolutely confidential at the State Board of Health offices, and there is no interference in the treatment of private patients, and no publicity. Only when an individual is reported unguarded is any investigation made. The source of infection, where ascertainable, is also important, and often offers a fruitful field for investigation.

Special blanks have been provided for the reporting of venereal cases, and will be furnished promptly upon request.

Apprehending of Infected Persons.—The work of apprehending individuals reported a menace is largely carried out through the local police authority. Officials have been very cooperative in this regard. Any prostitute can be picked up on suspicion and held for forty-eight hours, pending a report on her Wassermann, and many internments have been made through these channels. The prostitute, obviously, forms the greater portion of quarantined cases, approximately seventy-five per cent. of women state venereal patients being self-admitted prostitutes.

Quarantine.—The choice of house or hospital quarantine is given. The advantages of the latter are so manifest that it is almost always chosen. In addition to the advantages, the brilliant hue of the quarantine placard and the extreme clearness of its message have a psychological effect.

Some provision had to be made for the quarantine and free treatment of individuals unable to pay for private care. It was decided to utilize existing hospitals rather than to establish new ones, and Detroit was the first city to offer

hospital beds. There are now, throughout the State, nine hospitals with a total of 321 beds, receiving interned State patients. The treatment given is uniform in all the hospitals.

In addition to medical care, each woman patient is given a psychopathic examination, and upon the results of physical, mental, and social histories, all after-care is based. The reports of the psychopathic tests are showing the close relation between subnormalities, prostitution and venereal disease. Averaging the State as a whole, eighty per cent. of the women patients are subnormal, twenty per cent. of these feebleminded and in need of institutional care. The medical-social problem which such women offer is at the same time baffling and interesting.

Up to November 27, 1918, there were 1,134 patients, both men and women, treated in hospitals at State expense.

Clinics.—The value of the well organized clinic in a venereal disease campaign is fully appreciated. There are now seven city clinics and one hospital clinic giving treatments and the work will be extended. The clinic maintained in Battle Creek, under the State Board of Health, is proof of the practicability of the pay clinic.

Social Service Department.—Realizing that medical treatment of infected women was incomplete without supplementary social care to prevent an endless round of re-infections and to effect rehabilitation, a Social Service Department was organized early in the campaign. There are now thirty-two towns and counties equipped to handle the work, under a director at Lansing. The salaries of all these workers are, with one exception, paid by the communities in which they work, showing splendid cooperation.

The social work begins in the hospital. Occupational training and recreation are being installed in all of the hospitals, with the idea of furnishing some definite training to the interned women. Every woman State patient, upon release from a hospital, is given general supervision, employment found, living conditions looked after, the medical after-treatment supervised and rehabilitation attempted. Considering the difficulty of the social problem involved, the results thus far have been very encouraging.

Department of Education.—Realizing also that education is one of the best methods of prevention of venereal disease and that until an informed public opinion is back of the whole campaign there can be little hope of its permanence, the Department of Education was organized. The work is being carried on through lecturers, pamphlets, exhibits, and posters, reaching group organizations. The prevention of venereal disease is the basis for the work, but it embraces the whole field of social hygiene. With public interest for the first time aroused, the opportunity for constructive educational work along this line is unlimited.

This, in brief, is the plan of the venereal disease campaign as it is being conducted by the Michigan State Board of Health. A plan of this sort must of necessity be a gradual development, rather than a superimposed and set program. The success of the work thus far and the need for its continuance is unquestioned. But the support of every physician in the State is necessary if the campaign is to be effective. This must be not only interested but active support. If every physician will take it upon himself to report all cases coming to his attention, together with the source of infection, to carefully instruct his own patients, and to do his utmost in the way of educating the people generally the movement will have much greater assurance of success.

A pamphlet entitled "The Michigan Plan for the Suppression of Venereal Diseases" prepared under the direction of The Michigan State Board of Health may be obtained by writing to the State Board of Health at Lansing, Mich.

THE MEDICAL PROFESSION AFTER THE WAR.

In April, 1917, our country called on the medical profession for volunteers for medical service. The response was both prompt and generous. Again and again the call came, and each time met similar prompt and generous response. Some 35,000 physicians have responded to these calls and are serving in the Army or in the Navy. In addition, about 25,000 physicians have given freely of their time and labor to work on Selective Service Boards, thus making possible that efficient, physically fit machine—the National Army.

It is too soon—the world, victorious and vanquished, too unsettled—to say what is coming and what it to be done. It is an hour in which nations are being made, unmade and remade. We hear, we talk, we read of reconstruction. The reconstruction problems are, in the main, twofold: one, the salvaging of mutilated humanity; the other, the reconstruction of devastated cities, towns and villages.

The former, the salvaging of the heroic remnants of war-worn men, is the more important. Our reconstruction problem as applied to the physical reconstruction of the disabled soldiers is certain not to be the gigantic task that it would have been had the war continued for a long period of time. There will, of course, be much to do in this regard; but this work is in competent hands and well provided for. Our reconstruction problem as it applies to the returning of more than 30,000 military physicians to civilian life is again not a problem of magnitude. The physician before he went to war was, in most instances, a man of home and family, and in most instances home, family, his professional confreres and the community wait to welcome him with honors.

However, our reconstruction problem as it concerns the relation of the physician to the great social problems that are to arise "after the war," is a problem of magnitude. One's senses are startled by phrases in the modern writings on social and economic subjects. One hears of "equalization of risk and return," of "conscription of wealth," of "health insurance," of "national ownership," of "state medicine," of a "league of nations," "international medical alliances," and similar conceptions. With these, and as a part of these, will be new problems of the relation of physicians to each other and to the public. Physicians will have as much influence as any other class in the weaving of the new social fabric. It is well to realize this and to appreciate the need of closer knitting together of the profession itself —of stronger organization—so that we may face these problems with the strength of many minds united. Thus the medical profession may be able, not only to secure the rights and recognition it merits, but also to have that real influence necessary for the best interests of the public health in the new order of things. The medical profession has served, it serves and it will continue to serve when called on, but in its altruism must not forget that the profession will have to guard its own rights and prerogatives if they are to be guarded at all.—*A.M.A. Jour.*, Nov., 1918.

Rabies Vaccine (Harris).—An antirabic vaccine standardized by the method of Dr. Harris and stored in vacuo. Each package contains vaccine and apparatus for the administration of one complete treatment. One dose is given daily for ten days or more. National Pathological Laboratories, Chicago (*Jour. A.M.A.*, Nov. 30, 1918, p. 1825).

Editorial Comments

The Seventh Conference of Industrial Physicians and Surgeons was held December 6th at the Bellevue-Stratford Hotel in Philadelphia, Pennsylvania.

NO MORE PHYSICIANS TO BE COMMISSIONED IN THE MEDICAL CORPS.

At ten o'clock on the morning of November 11th, the War Department discontinued the commissioning of physicians in the Medical Corps.

This condition, in all probability, is permanent and no further consideration will be given applicants for a commission in the Medical Corps until further notice.

The war is over; peace reigns on earth. But in Europe to-day there are more than 2,000,000 American soldiers, who took an important part in bringing the war to a victorious end, and these men must be fed and clothed for a long while to come. It is estimated by the War Department that the cost of equipping and maintaining an American soldier in Europe is $423.27 a year.

The American army was transported to France at the rate of 250,000 men a month by giving them first call on the shipping facilities of the United States. If they could be brought back to their homes thus speedily—and it is doubtful that they could—it would require at least eight months. It is obvious, therefore, that we must continue to raise money with which to maintain our army abroad.

"We are going to have to finance peace for a while," said Secretary of the Treasury McAdoo, "just as we have had to finance war."

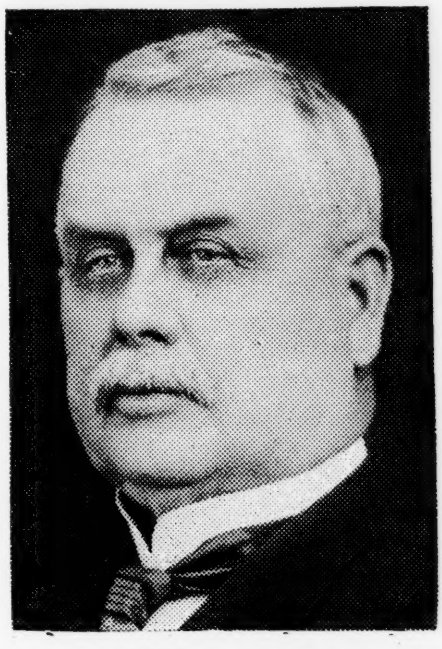
And that means that the American people, having supported four Liberty Loans with a patriotism which future historians will surely extol, are to be vouchsafed an opportunity to support our victorious peace. There will certainly be at least one more Government Loan. There probably will be two more—and possibly three. At any rate, the next Loan must be prepared for and its success made certain. Get ready now to buy more bonds.

Compound Solution of Cresol.—In an eastern institution where members of the U. S. hospital corps are being instructed, a bottle containing Liquor Cresolis Compositus is labeled "Lysol" so that doctors may recognize it. Comment is superfluous (*Jour. A.M.A.*, Nov. 30, 1918, p. 1830).

Deaths

Doctor Otto C. McDannell, of Lowell, Michigan, who has been a member of the Society since its organization, died November 20th at his home after a very short illness.

In his death there passes away another old time family doctor, of which type he was



DR. OTTO C. McDANNELL

typical. The family physician is passing away, one who in sickness and sorrow was their comfort and in whose pleasures and enjoyments they were an integral part. His life and acts were models in his community and were loved by all. How few remain!

Doctor McDannell was born in Keokuk, Iowa, June 5, 1844. At the age of 19 he finished the medical course at the Medical College in Keokuk, but on account of his age he did not receive at that time his diploma. He served as an assistant surgeon in the Union Army during the years 1863 and 1864, and after the Civil War he took a post-graduate course at the Rush Medical College at Chicago, and later served as an interne at Mercy Hospital. After remaining in Logansville, Wisconsin, where he began active practice but a short time he came to Lowell, Michigan, where he has practiced for a period of about fifty years.

The Doctor was one of the most prominent as well as one of the most loved citizens in that community. He was a member of the Congregational Society, served faithfully for many years on the Lowell School Board; served as a trustee of the village and also as its president; was president of the Lowell Board of Trade; a member of the Masonic lodge, the Order of the Eastern Star, a Chapter Mason, a Knight Templar and a member of the Shrine.

He is survived by his widow, two daughters, and a host of friends who deeply mourn his death.

It is with regret that we record the death of **Doctor R. G. Marriner,** who died at his home in Menominee, Michigan, as a result of secondary pneumonia which was induced by fractured ribs sustained in a fall.

Dr. Marriner was born in London, England, on December 5th, 1857, and at the age of ten years came to the United States. His parents located in Chicago, and there he completed his academic education. He was matriculated in the Rush Medical College in 1876 and was graduated from the Chicago Medical College as a member of the class of 1881. After his graduation Doctor Marriner initiated the practice of his profession at Marinette, where he remained until 1888 when he moved to Menominee and had since practiced.

At the time of Doctor Marriner's death, he was City Health Officer at Menominee, and was prominently identified with the Masonic lodge.

The many friends and acquaintances of **Doctor John F. Dunwoody,** were shocked to hear of his death which took place October 20th at his home in Detroit, Michigan.

Doctor Dunwoody graduated from the Detroit College of Medicine in 1911 after which he served as interne at St. Mary's Hospital. He first located in Highland Park, and subsequently moved his office to Detroit. He is survived by a widow and two small children, besides his mother and sisters.

Doctor John C. Reynolds, of Battle Creek, Michigan, died at his home Wednesday, November 20th, of heart disease. He has long been a member of the State Society.

Doctor B. T. Philips, died at his home in Menominee, Michigan, November 29th, 1918, of infirmities due to his advanced age. The doctor had been in declining health for some time. On January 1st, 1916, he suffered a stroke of paralysis from which he never fully recovered.

Dr. Philips was born October 14th, 1840, in Wadsworth, Ohio, and at the age of five immigrated to Wisconsin. He served in the Second

Wisconsin Cavalry and with the 32nd Wisconsin Infantry during the Civil War. He graduated from the Rush Medical College of Chicago in 1870, after which he located in Fond du Lac, and in 1872 he moved to Menominee, Michigan.

Doctor Philips served as president of the Wisconsin State Medical Society in 1892. He has been surgeon for the C. & N. W. Ry., and for many years was surgeon of the Chicago, Milwaukee and St. Paul, and before that was surgeon for the Milwaukee, Northern Ry. Co. He was identified with the Masonic bodies of Menominee. He was a charter member of the Commandry of which he was second Eminent Commander, also of the Chapter and Aladdin Mystic Shrine. For sixteen years he was a member of the school board and was the first superintendent of schools that Menominee had.

The doctor is survived by his widow and one daughter.

Word has just been received of the death of **Doctor Harvey W. Smith,** of Carsonville, Michigan, at his home, November 17th, from pneumonia.

Doctor Smith graduated from the Toronto School of Medicine in 1880, and has been a member of the State Society for a number of years.

Doctor A. C. McCurdy, of Battle Creek, is the second member of our Society to pay the supreme sacrifice. According to word received by Mrs. McCurdy from the Adjutant General's office, Doctor McCurdy died November 28th, of a carbuncle on the face.

When Lieut Col. Case organized the Battle Creek ambulance corps, Doctor McCurdy was one of the physicians who immediately offered his services and was commissioned a lieutenant. Not long after the ambulance corps' arrival in Allentown, Lieutenant McCurdy was promoted to Captain and soon after Major, and was commanding officer of battalion 16. After training at Allentown, Major McCurdy landed at Genoa, Italy, and following the close of hostilities there he was sent to France. At the time of his death he was connected with the 33rd engineers in France.

Major McCurdy was born in Battle Creek in June, 1886. He was educated in the Battle Creek Schools, and was a graduate of the University of Michigan. Previous to his entering the army, he had a large practice in Battle Creek as well as in the country districts and was well known throughout the county.

DR. A. C. M'CURDY.

Major McCurdy was a member of the Masonic Consistory, the Shriners, and the Elks. Besides his widow, Major McCurdy is survived by his mother, one sister, and one brother.

Mrs. H. J. Vandenberg, wife of Doctor H. J. Vandenberg, of Grand Rapids, Michigan, died December 10, 1918, at Blodgett Memorial Hospital.

Randolph Rogers, son of Doctor John R. Rogers, Grand Rapids, Michigan, is reported as having been killed in France on July 15, 1918.

A Short Sighted Druggist.—A correspondent writes: 'I went to a nearby drug store and asked for twenty-five cents' worth of Liquor Antisepticus Alkalinus; I got one ounce! The druggist charged me fifteen cents an ounce, and ten cents for the container. Next time I fear I shall be forced to get Glycothymoline!" To penalize a man who calls for an official product so as to drive him to ask for a "patent medicine" of the same general character is both poor pharmacy and bad business (*Jour. A.M.A.*, Nov. 23, 1918, p. 1745).

State News Notes

U. OF M. TO ASSIST IN NURSE TRAINING.

Will Be State Center for Public Health Work.

With a limitless demand in America and Europe for public health nurses during the reconstruction period and rehabilitation of soldiers and their families, the National Organization for Public Health Nursing and its war program committee, headquarters in Washington, is making every effort to meet this situation.

Nursing associations of Detroit and the State are planning to aid. A department of nursing and health will be established at the University of Michigan soon, to be the training center for all nurses in Michigan.

"The plan for the department at the university was made some time ago, but was abandoned temporarily," says Mrs. L. E. Gretter, superintendent of the Detroit Visiting Nurse Association and State chairman of the committee on Red Cross Nursing, "because the great number of nurses who had been called into the military service made it impossible to obtain trained directors."

Mrs. Gretter says the State committee will endeavor to place a public health nurse in every county.

The public health nurse cares for babies, for children at school, for men and women in industry, on farms or wherever they may be. By teaching she educates and protects against illness: she is nurse first, but friend and teacher as well.

The National Organization encourages the establishment of more courses for the graduate nurse who wishes to fit herself for special service. More is required than the nurse's regular training, because problems of applied economics and sociology must be met.

Secretary McAdoo, Surg.-Gen. Blue, the war department and other government agencies have been showered with letters from men and women all over the country who have "surecures" for influenza. Some are willing to spread their remedies broadcast for the benefit of humanity, others offer to supply the nostrums at so much a bottle or a person, and others express their willingness to be remunerated by the government. A physician offered to furnish his remedy at $4.50 for each patient or to take a surgeon major's commission and pay.

Sulphur in the Shoes.

"Sprinkle a little sulphur in each shoe every morning," wrote one. Another advised a mixture of asafetida and whiskey. A man who lives "at the jumping off point in Western California says of his medicine, which is supposed to knock out germs, "I got it by combining wonderful essential oils that will penetrate the hardest wood that grows. The compound, while it is not a poison, will penetrate any and all kinds of germs or insects and dry or burn them up in a minute."

Recalling the statement that the influenza epidemic probably originated in the Orient, a woman advised an examination of all pepper and tobacco in the country.

The wearing of lavallieres of camphor or asafetida, set in gauze, has many advocates.

Commenting on these "sure cures" the public health report of the United States Public Health Service says:

"Comes also the mental scientist who regards the epidemic as engendered by fear." It quotes (source not given): 'This sort of infectious suggestion is a crime against the public, is treason to our government, and the traitors responsible for it shall not be allowed to go unpunished."

Alleged "Cures" Harmful.

"The United States Public Health Service," the report continues, "urges the public to remember that there is as yet no specific cure for influenza and that many of the alleged 'cures' and remedies now being recommended by neighbors, nostrum venders and others do more harm than good. The chief reliance must be on fresh air, nutritious food, plenty of water, cheerful surroundings and good nursing. If any specific like a vaccine or serum is found to have value the Public Health Service will give the matter wide publicity."

The Anti-Tuberculosis Association is making arrangements for a special free tuberculosis clinic to be held in Jackson. The work will be in charge of Miss Charlotte Ludington, field nurse of the State Association, and Doctor E. R. Vander Slice, Medical Director of the Association. These will be assisted by local physicians and other health workers. The clinic will be held at the W. A. Foote Memorial Hospital.

Lieutenant William E. Wilson, of Grand Rapids, has been awarded a distinguished service medal for his splendid bravery under fire, and was also promoted to captaincy. Doctor Wilson was severely injured about the right knee as the result of a shell wound received in the Chateau-Thierry sector.

It is the opinion that tuberculosis in Michigan will increase as a result of the Spanish influenza epidemic. The influenza is breaking down general resistance to all kinds of infection, especially to tuberculosis.

Doctor C. C. Slemons, Health Officer at Grand Rapids, Michigan, was authorized by the City Commission to attend the national conference of the American Public Health Association held in Chicago during the second week of December.

Doctor L. M. Ryan, of Caro, has been appointed as Acting Assistant Surgeon of the United States Public Health Service, for duty in connection with the control of the influenza epidemic.

Doctor A. M. Martin, Grand Rapids, Michigan, has been commissioned a Captain and made Division Orthopedic Surgeon of the 32nd division with which he has been serving since the division went overseas.

Doctor Frank Marshall, of Pequaming, Michigan, who entered the army as a First Lieutenant in the Medical Corps in June, 1917, was promoted to Captain in France in September.

Wards of the Children's Aid Society and the Detroit Branch of the Michigan Children's Home So-

ciety are to be subjected to a program of health clinics.

The University of Michigan received $5,000.00 from the State War Preparedness Board to use for a one year course in public health work.

Doctor Mabel E. Elliott, of Benton Harbor, has received notification of her assignment to the military hospital in France.

Doctor W. P. Morrill, of Benton Harbor, has been promoted from Major in the medical corps to a Lieutenant Colonel.

Doctor P. H. Quick, Secretary of the Eaton County Medical Society, is Surgeon of the S. A. T. C. unit at Olivet, Michigan.

Doctor Walter R. Hicks has been appointed Health Officer at Menominee, Michigan.

Doctor Ray S. Morrish, of Flint, has been promoted to rank of Major.

Doctor G. A. Fritch, of Detroit, has again been charged with mal-practice.

Doctor T. J. Carney has resigned as Local Health Officer at Alma, Michigan.

COUNTY SOCIETY NEWS

It is the Editor's desire to have this department of the Journal contain the report of every meeting that is held by a Local Society. County Secretaries are urged to send in these reports promptly

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BAY COUNTY

The annual meeting of the Bay County Medical Society was held Monday evening, December 9th, 1918. Doctor H. B. Morse, the retiring President gave a sumptuous banquet at the Wenona Hotel at 6:30 p. m., after which instead of the usual President's address he entertained the members present by reading some very interesting letters from the members in U. S. Service. These letters were replete with thrills of war and we all feel that they are having a great and wide experience.

The Secretary-Treasurer gave reports of the finances of both the Society and the Bay County Medical Society Patriotic Fund, having paid out $1,572.00 to wives of members in service under rank of Captain.

The following officers were elected for the ensuing year: President, Doctor C. M. Swantek, Bay City; Vice-President, Doctor D. M. Dayton, Kawkawlin; Secretary-Treasurer, Doctor Morton Gallagher; Delegates, Doctor H. B. Morse, and Doctor Morton Gallagher, and Doctor C. H. Baker, and Doctor J. C. Grosjean as alternates; and Doctor T. A. Baird of Bay City as Medico-Legal Advisor.

CALHOUN COUNTY

The forty-second annual meeting of the Calhoun County Medical Society was held in the City Hall, Battle Creek, December 10. Lieut. Colonel Creighton, Lieut. Colonel Ernest Irons, Major Lynn F. Beals, and Captain Seward Erdman, all of Camp Custer were our guests. The program consisted of a Symposium on Influenza and Pneumonia, the first part of which was given by Major Beals, while Captain Erdman spoke on Complications from a Surgical Standpoint.

Various committee reports were heard, and the report of the Secretary-Treasurer for the past year. The election of officers occurred and the following were chosen:

President, Dr. H. A. Shurtleff, Marshall; Vice-President, Dr. C. S. Gorsline, Battle Creek; Secretary-Treasurer, Dr. A. F. Kingsley, Battle Creek.

The past year has been a very profitable one in many ways, and we were especially honored in that we were for the second time permitted to entertain the Michigan State Medical Society at its annual meeting. Our membership has remained practically the same, and not a single member was suspended for non-payment of dues. We believe this sets a record for a Society of one hundred members.

No banquet was given at this annual meeting, that function being deferred until later, when we hope to have with us some of our members who are now in military service.

Dr. John Smith, Dr. M. S. Vaughn and Dr. F. J. Gibson appointed a committee by the Jackson County Medical Society to draft resolutions on the death of Dr. James A. McQuillan, who was killed in action, have prepared the following:

Whereas: Divine providence has removed from our midst and membership, our honored colleague Dr. James A. McQuillan, who cheerfully and voluntarily responded to the call of his country during the most critical period of the war, and,

Whereas: By untiring effort and complete indifference to personal welfare and comfort he sacrificed himself through a desire to be of assistance to the United States and for the good of the cause, and,

Whereas his personality and memory will never die among those who were his friends and close associates therefore, be it resolved

That the Jackson County Medical Society realized the loss of a brave, noble, patriotic member and hereby expresses its sympathy to the bereaved wife and the mourning family of his parents, and instructs the Secretary of the Society to send a copy of this expression of deepest and heartfelt sympathy to both families.

EATON COUNTY

At the annual meeting of the Eaton County Medical Society which was held in Charlotte, December 5th, the following officers were elected: President, Doctor J. D. McEachran, Vermontville; Vice-President, Doctor C. B. Wasson, Bellevue; Secretary-Treasurer, Doctor Phil. H. Quick, Olivet; Delegate, Doctor F. R. Blanchard, Eaton Rapids.

After the election of officers, a timely and interesting program was carried out.

GENESEE COUNTY

At the meeting of the Genesee County Medical Society held November 9th the following officers were elected: Presdient, Doctor C. H. O'Neil; Vice-President, Doctor C. D. Chapel; Secretary, Doctor D. D. Knapp; Treasurer, Doctor A. Patterson; Medico-Legal Officer, Doctor R. H. Niles; Member of the Board of Directors, Doctor Noah Bates; Delegate, Doctor Ed. Diamond, and alternate, Doctor A. H. Blakely.

Doctor A. H. Hume, of Owosso, Michigan, President of the Michigan State Medical Society, gave an interesting talk. Luncheon was served and it was noted that in future all food would be served in country style in accordance with the gastromic conditions of our worthy President.

GRAND TRAVERSE-LEELANAU COUNTY

At the regular meeting of the Grand Traverse-Leelanau County Medical Society held in Traverse City, December 2nd, 1918, the following officers were elected for the ensuing year: President, Doctor J. J. Brownson, Kingsley; Vice-President, Doctor Frank Holdworth, Traverse City; Secretary-Treasurer, Doctor H. V. Hendricks, Traverse City, Michigan. Doctor J. B. Martin, of Traverse City was elected a member of the Medico-Legal Committee.

INGHAM COUNTY

The annual meeting of the Ingham County Medical Society was held at the home of the retiring President, Doctor C. V. Russell.

The new elected offices are: President, Doctor John G. Rulison, Lansing; Vice-President, Doctor Fred M. Huntley, Lansing; Secretary-Treasurer, Doctor Earl I. Carr, Lansing.

Doctor and Mrs. Russell entertained the Society and their wives at dinner previous to the meeting.

JACKSON COUNTY

The annual meeting of the Jackson County Medical Society was held at the W. A. Foote Memorial Hospital, Thursday evening, December 5th, and the following officers were elected: Doctor Walter R. Snow, President; Doctor M. S. Vaughn, Vice-President; Doctor W. L. Finton, Secretary; Doctor L. J. Harris, Treasurer; Doctor F. Rose, Delegate, and Doctor F. W. Rogers, Alternate.

The Society paid a touching tribute to Doctor J. A. McQuillan who was killed in action in France, and the absent members of the Society who are in the service were given a vote of confidence.

KENT COUNTY

At the annual meeting of the Kent County Medical Society held December 18th, the following officers were elected:

President, Dr. H. J. Vandenberg, Grand Rapids; Vice-President, Dr. P. L. Thompson, Grand Rapids; Secretary-Treasurer, Dr. A. V. Wenger, Grand Rapids; Assistant Secretary, Dr. V. M. Moore, Grand Rapids; Defense League, Dr. G. L. McBride, Grand Rapids; Delegates, Dr. J. D. Brooks, Grandville; Dr. S. L. Rozema, Grand Rapids; Dr. A. V. Wenger, Grand Rapids; Alternates, Dr. J. Kremer, Grand Rapids; Dr. C. W. Brayman, Cedar Springs; Dr. D. G. Houghton, Caledonia; Magic Lantern Artist, Dr. G. L. Bond, Grand Rapids.

Book Reviews

THE SURGICAL CLINICS OF CHICAGO, Volume II., Number V., 87 illustrations. Published by the W. B. Saunders Co., Philadelphia and London.

The Surgical Clinics of Chicago is an always welcome visistor. No surgeon's Journal list is complete without a copy of same. It would be impossible to select one individual subject as all of them are distinct contributions and of special value. The subject presents profound interest for the general practitioner and surgeon alike.

PRINCIPLES AND PRACTICE OF INFANT FEEDING. By Julius H. Hess. M.D., Philadelphia, F. A. Davis Co., 1918. 338 pages. Illustrated. Price $2.00.

This manual is more of a guide for students and teachers in clerical work. A greater condensation in the modern theory and practice of infant feeding could be made. The favorite feeding practice of the author shows a somewhat pessimistic condition. The author goes into detail in the management of feeding the premature infant. He favors Finkelstein's classification and presents a good and instructive guide on the principles of infant feeding.

MENTAL DISEASES, a handbook dealing with diagnosis and classification. By Walter Vose Gulick, M.D., Assitant Superintendent of the Western State Hospital, Fort Steilacoom, Washington. Illustrated. C. V. Mosby Co., St. Louis, Mo. Price, $2.00.

This book deals with classification and diagnosis. The classification gets rid of many of the obscure divisions and attempts to classify the different psychoses under each causative department. Anatomical structural changes are not shown. Numerous cases with differential symptoms are reported. In all it is an attempted classified psychoses and is a handy and ready reference.

CLINICAL MEDICINE FOR NURSES. By Paul H. Ringer, M.D. Published by the F. A. Davis Co. Price, $2.00.

The writer presents a subject that shows advanced ideas for the already over burdened nurse. Its attempt would make them become, if its teachings were followed, good diagnosticians and practitioners. It is concise, well written and more fitting to be added to the group of student clinical medicine.

INFORMATION FOR THE TUBERCULOUS. By F. W. Wittich, A.M., M.D., Instructor in Medicine and Physician in charge of tuberculosis dispensary in the University of Minnesota Medical School; Visiting Physician to University Hospital, Minneapolis. C. V. Mosby Co., Publishers. C. V. Mosby Co., St. Louis, Mo., $1.00.

All tuberculars are anxious to know all about their individual conditions. In the compilation of this work the author has endeavored to inform the tubercular of his exact condition in language that is by them best understood. The anatomy of the lung, the tubercular bacillus, its action, its association with the other organs and the effect upon the lung is so nicely told that any layman can understand. The three cardinal principles of cure—rest, diet, and climate, are so nicely interwoven that by following the same, good and valid results could be obtained. It should be read by every tubercular as it will disabuse their mind of the many prevailing fallacies.

MANUAL OF OTOLOGY. By G. Bacon, A.B., M.D., F.A.C.S. Assisted by Truman Lawrence Saunders, A.B., M.D., Seventh Edition, revised and enlarged. 583 pages with 204 illustrations and 2 plates. 12 mo. Lea & Febiger, New York and Philadelphia, 1918. $3.00.

Doctor Bacon's works have so long been a recognized manual on Otology by the specialist that each succeeding edition gives us all the advanced ideas. The "Running Ear" his chapter on chronic middle ear discharges if read by the general practitioner would show him the dangers which might result therefrom which are not so generally known and patients referred to their proper place for treatment. The interpretation of Nystagmus, vertigo, nausea, and vomiting in relation to diseases of the labyrinth and the conservatism advised in their treatment is well worth careful consideration.

Miscellany

PUBLIC INFORMATION ESSENTIAL IN STATE BOARD ACTIVITIES.

By Geo. L. LeFevre, M.D., F.A.C.S.,
Muskegon, Michigan.

In handling the subject assigned me, namely, "Public Information Essential in State Board Activities," I was not sure from which angle I was supposed to deal with the subject; the standpoint of the "Public" or that of the "State Boards," or both. I am sure, though, that the public is far more in the dark as regards our activities than we are as to their needs. They have something else to occupy their minds, and as you all know,

"Just at the brink of danger—not before—
God and the doctor they implore.
But when danger is past and all is righted,
God is forgot and the doctor slighted."

The public sees 'through a glass darkly, but some day face to face," and that time is not far distant. The world war, the calling of hundreds of doctors to the colors, the diminution in the number of medical students and medical schools is rapidly producing a scarcity of doctors that will soon arouse the public to the due necessity of concerted action in order to secure competent physicians.

The public should know, through the medium of publicity, that the State Boards are the "S. O. S." of their existence, that they are public benefactors, serving without compensation, to protect from subluxation acrobats, bath-tub-healers, newspaper specialists and therapeutic vultures and quacks. German kultur is as logical as their ministrations.

I have heard that the State Boards and medical schools are being accused of being responsible for the increase in the number of new cults, due to increased requirements for an M.D. degree. I resent such accusations and feel, yes know—that the public alone is responsible for their existence. So long as people are willing to trust their health and life to these uneducated, unscientific, advertising quacks, there is always occasion for their existence; but the minute the public is educated to the fact that the blacksmith is just as safe to repair your watch as they are to cure pathological conditions—just that minute will they cease to exist. The public must be taught that our efforts are to place at their disposal educated, scientific physicians and surgeons, men and women who can be trusted to give efficient service.

It seems to me that those who seek relief from these quacks are "like an infant crying in the night, an infant crying for the lights with no other language but a cry." Publicity must furnish them the light and it is the language of publicity that we must furnish them. Public information is essential in State Board activities.

Furthermore, in looking over the number of students examined this year as compared with a few years ago, I feel that the public should be made aware of the fact that in spite of the marked increase in population that we are graduating fewer doctors each year. It is only a question of time until the public will suffer from the lack of competent medical and surgical attention. This fact should be brought home to them, students entering high school should be shown the possibilities awaiting them in our profession, and that we are just as anxious, if not more so, to give our O. K. and aid in their preparation, as we are to prevent the unscrupulous cults from carrying on their quackery. Also these students should be advised as to what schools they should enter in order to be able to appear before all State Boards for examination without any question as to their eligibility to take said examinations, and in order that they may receive reciprocity if so desired.

I could spend much more time upon this subject, but I feel it is not necessary, for you all see the dire necessity of bridging that gulf that lies between our State Board activities and the public. I can not help but feel if they knew of our work and our labors to benefit mankind as a whole, that we would receive enthusiastic support from them and that all quackery would be crucified and our legitimate schools filled with bright young men and women now and always.

Further, I would suggest that our patriotic doctors who have left their practice and enlisted in the service should be given universal reciprocity upon their return.

OUR HONOR ROLL.

County Secretaries are requested to report the names of all members in the Service.

Bay County.

Dr. F. S. Baird, Bay City; Dr. F. W. Brown, Bay City; Dr. S. L. Ballard, Auburn; Dr. C. V. Crane, Tawas City; Dr. V. H. Dumond, Bay City; Dr. E. Goodwin, Bay City; Dr. E. S. Huckin, Bay City; Dr. H. P. Lawrence, Pinconning; Dr. R. C. Perkins, Bay City; Dr. F. H. Randall, Bay City; Dr. R. E. Scrafford, Bay City; Dr. M. R. Slattery, Bay City; Dr. P. R. Urmston, Bay City.

Benzie County.

Dr. C. P. Doyle, Frankfort.

Branch County.

Dr. W. J. Bien, Union City; Dr. W. A. Griffith, Coldwater.

Calhoun County.

Dr. J. T. Case, Battle Creek; Dr. E. M. Chauncey, Albion; Dr. James Elliott, Battle Creek; Dr. R. V. Gallagher, Battle Creek; Dr. J. G. Gage, Battle Creek; Dr. W. Haughey, Battle Creek; Dr. G. C. Hafford, Albion; Dr. A. A. Hoyt, Battle Creek; Dr. J. J. Holes, Battle Creek; Dr. C. W. Heald, Battle Creek; Dr. T. Kolvoord, Battle Creek; Dr. A. C. McCurdy*, Battle Creek; Dr. W. N. Putman, Battle Creek; Dr. A. H. Ross, Battle Creek; Dr. A. J. Read, Battle Creek; Dr. R. D. Sleight, Battle Creek; Dr. R. C. Stone, Battle Creek; Dr. L. H. Tower, Battle Creek; Dr. E. Van Camp, Athens; Dr. C. G. Wencke, Battle Creek.

*Died in France, November 28th, 1918.

Cheboygan County.

Dr. A. J. Sahs, Cheboygan.

Chippewa-Luce-Mackinac County.

Dr. F. C. Bandy, Newberry; Dr. M. V. Gates, Eastport; Dr. R. D. Scott, Rudyard; Dr. T. R. Whitmarsh, Ypsilanti; Dr. R. C. Winslow, Sault Ste. Marie; Dr. I. V. Yale, Sault Ste. Marie.

Clinton County.

Dr. M. S. Gregory, Eureka; Dr. W. A. Scott, St. Johns; Dr. D. H. Silsby, St. Johns; Dr. W. M. Taylor, Ovid.

Delta County.

Dr. J. L. Conover, Rapid River; Dr. H. W. Long, Escanaba; Dr. J. J. Walch, Escanaba.

Genesee County.

Dr. G. H. Bahlman, Flint; Dr. C. S. Ballard, Flint; Dr. M. W. Clift, Flint; Dr. C. P. Clark, Flint; Dr. Henry Cook, Flint; Dr. V. H. DeSomoskeoy, Flint; Dr. J. W. Evers, Flint; Dr. G. R. Goering, Flint; Dr. B. Goodfellow, Clio; Dr. J. N. Houton, Flushing; Dr. J. Houston, Swartz Creek; Dr. J. G. R. Manwaring, Flint; Dr. F. B. Miner, Flint; Dr. R. S. Morrish, Flint; Dr. W. H. Marshall, Flint; Dr. J. W. Orr, Flint; Dr. A. T. Pauell, Flint; Dr. K. G. Pratt, Flint; Dr. F. E. Reeder, Flint; Dr. W. C. Reid, Grand Blanc; Dr. A. J. Reynolds, Flint; Dr. E. C. Rumer, Flint; Dr. H. E. Randall, Flint; Dr. F. A. Roberts, Flint; Dr. B. R. Sleeman, Linden; Dr. W. H. Winchester, Flint; Dr. L. S. Willoughby, Flint.

Gogebic County.

Dr. C. D. Collins, Ironwood; Dr. G. J. Curry, Watersmeet; Dr. E. B. Stebbins, Ironwood.

Grand Traverse-Leelanau County.

Dr. G. A. Holliday, Traverse City; Dr. G. M. Johnson, Traverse City; Dr. W. D. Mueller, Traverse City; Dr. E. L. Thirlby, Traverse City.

Gratiot-Isabella-Clare County.

Dr. Ralph E. Dawson, Blanchard; Dr. C. B. Gardner, Alma; Dr. C. D. Pullen, Mt. Pleasant; Dr. A. R. Mussell, Clare; Dr. B. J. Sanford, Clare; Dr. T. P. Vanderzalm, Blanchard.

Hillsdale County.

Dr. W. R. Atterbury, Litchfield; Dr. T. H. E. Bell, Reading; Dr. B. F. Green, Hillsdale; Dr. E. A. Martindale, Hillsdale; Dr. H. C. Miller, Hillsdale; Dr. I. J. Stoner, Jonesville.

Houghton County.

Dr. J. F. Barton, Calumet; Dr. R. B. Harkness, Houghton; Dr. H. M. Joy, Calumet; Dr. N. S. MacDonald, Houghton; Dr. P. D. MacNaughton, Calumet; Dr. J. D. McKinnon, Calumet; Dr. F. F. Marshall, Pequaming; Dr. V. L. Oler, Kearsarge; Dr. B. H. Olmsted, Calumet; Dr. L. M. Power, Hancock; Dr. James Rhines, Laurium; Dr. D. D. Todd, Adrian; Dr. A. R. Tucker, Mohawk; Dr. L. E. Werry, Calumet.

Huron County.

Dr. A. E. W. Yale, Pigeon.

Ingham County.

Dr. H. S. Bartholomew, Lansing; Dr. C. L. Barber, Lansing; Dr. M. L. Cushman, Lansing; Dr. F. J. Drolett, Lansing; Dr. Clara Davis, Lansing; Dr. C. W. Ellis, Lansing; Dr. J. A. Humphrey, Lansing; Dr. M. L. Holm, Lansing; Dr. H. B. Knapp, Lansing; Dr. H. W. Landon, Lansing; Dr. R. R. McCrumb, Lansing; Dr. C. H. Murphy, Lansing; Dr. H. A. Miller, Lansing; Dr. A. E. Owen, Lansing; Dr. R. A. Pinkham, Lansing; Dr. J. G. Rulison, Lansing; Dr. M. Shaw, Lansing.

Jackson County.

Dr. W. B. Anderson, Jackson; Dr. H. D. Brown, Jackson; Dr. R. Cooley, Jackson; Dr. C. R. Dengler, Jackson; Dr. C. E. DeMay, Jackson; Dr. W. H. Enders, Jackson; Dr. H. L. Hurley, Jackson; Dr. Thos. Hackett, Jackson; Dr. R. G. Hendricks, Jackson; Dr. W. Lake, Grass Lake; Dr. R. H. Leece, Munith; Dr. D. B. Marsh, Jackson; Dr. J. J. McCormick, Jackson; Dr. C. D. Mumro, Jackson; Dr. Fred Main, Jackson; Dr. J. A. McQuillan*, Jackson; Dr. J. O'Mara, Jackson; Dr. E. S. Peterson, Jackson; Dr. G. Seybold, Jackson; Dr. G. E. Winter, Jackson.

*Killed in France, October 26, 1918.

Kent County.

Dr. H. J. Beel, Grand Rapids; Dr. H. Blackburn, Grand Rapids; Dr. R. C. Breece, Ada; Dr. J. S. Brotherhood, Grand Rapids; Dr. F. A. Boet, Comstock Park; Dr. A. M. Campbell, Grand Rapids; Dr. L. H. Chamberlin, Grand Rapids; Dr. J. R. Coryell, Grand Rapids; Dr. B. R. Corbus, Grand Rapids; Dr. C. W. Deaver, Grand Rapids; Dr. P. J. DePree, Grand Rapids; Dr. H. W. Dingman,

Grand Rapids; Dr. J. C. Foshee, Grand Rapids; Dr. C. M. Freeman, Ada; Dr. T. D. Gordon, Grand Rapids; Dr. H. A. Grube, Grand Rapids; Dr. J. T. Hodgen, Grand Rapids; Dr. J. N. Holcomb, Grand Rapids; Dr. W. D. Lyman, Grand Rapids; Dr. J. C. Kenning, Grand Rapids; Dr. F. C. Kinsey, Grand Rapids; Dr. W. D. Lyman, Grand Rapids; Dr. J. H. Muller, Grand Rapids; Dr. A. M. Martin, Grand Rapids; Dr. A. A. McNabb, Grand Rapids; Dr. A. G. McPherson, Grand Rapids; Dr. L. E. Sevey, Grand Rapids; Dr. R. R. Smith, Grand Rapids; Dr. A. B. Smith, Grand Rapids; Dr. F. N. Smith, Grand Rapids; Dr. R. E. Toms, Grand Rapids; Dr. R. T. Urquhart, Grand Rapids; Dr. P. Ver Meulen, Grand Rapids; Dr. W. E. Wilson, Grand Rapids; Dr. S. M. Wells, Grand Rapids; Dr. J. B. Whinnery, Grand Rapids; Dr. F. C. Warnshuis, Grand Rapids.

Manistee County.

Dr. Lee Lewis, Manistee; Dr. A. A. McKay, Manistee; Dr. H. McMullen, Manistee; Dr. W. Norconk, Bear Lake; Dr. L. Ramsdell, Manistee.

Marquette County.

Dr. I. Abrahanson, Negaunee; Dr. A. V. Braden, Ishpeming; Dr. H. T. Carriel, Marquette; Dr. W. B. Lunn, Marquette; Dr. C. J. Larson, Negaunee; Dr. I. Sicotte, Michigamme; Dr. L. L. Youngquist, Marquette.

Menominee County.

Dr. C. R. Elwood, Menominee; Dr. W. R. Hicks, Menominee; Dr. E. V. McComb, Menominee; Dr. H. T. Sethney, Menominee.

Muskegon County.

Dr. C. M. Colignon, Muskegon; Dr. H. S. Cole, Whitehall; Dr. B. R. Eastman, Muskegon; Dr. W. L. Herick, Whitehall; Dr. F. W. Hannum, Muskegon; Dr. V. S. Laurin, Muskegon; Dr. F. N. Morford, Muskegon; Dr. E. S. Thornton, Muskegon.

Oakland County.

Dr. F. S. Bachelder, Pontiac; Dr. S. A. Butler, Pontiac; Dr. L. G. Campbell, Birmingham; Dr. L. A. Farnham, Pontiac; Dr. F. D. German, Franklin; Dr. G. W. MacKinnon, Oxford; Dr. E. E. Orton, Pontiac; Dr. G. P. Raynale, Birmingham.

Oceana County.

Dr. C. Day, Clinton; Dr. G. F. Lamb, Pentwater.

Ontonagon County.

Dr. E. J. Evans Rockland; Dr. E. A. Florentine, Ewen; Dr. J. L. Kelliher, Phoenix; Dr. E. A. Linger, Rockland; Dr. D. L. Lutes, Victoria.

Sanilac County.

Dr. H. H. Angle, Snover; Dr. J. C. Webster, Peck; Dr. C. G. Woodhull, Decker.

St. Clair County.

Dr. I. P. Bowden, Port Huron; Dr. F. V. Carney, St. Clair; Dr. G. M. Kesl, Port Huron; Dr. A. J. MacKenzie, Port Huron; Dr. D. W. Patterson, Blain; Dr. G. Waters, Memphis; Dr. W. G. Wight, Yale.

Tuscola County.

Dr. F. P. Bender, Caro; Dr. W. C. Garvin, Millington.

Washtenaw County.

Dr. James F. Breakey, Ann Arbor; Dr. H. B. Britton, Ypsilanti; Dr. R. B. Canfield, Ann Arbor; Dr. H. W. Emerson, Ann Arbor; Dr. N. B. Foster, Ann Arbor; Dr. C. George, Jr., Ann Arbor; Dr. H. Malagan, Ann Arbor; Dr. Reuben Peterson, Ann Arbor; Dr. V. C. Vaughan, Ann Arbor; Dr. U. J. Wile, Ann Arbor.

THAT FLU STUFF.

If you have a tummy-ache,
It's the Flu!
If you're weary when you wake,
It's the Flu!
Is your memory off the track?
Is your liver out of whack?
Are there pimples on your back?
It's the Flu!

Are there spots before your eyes?
It's the Flu!
Are you fatter than some guys?
It's the Flu!
Do your teeth hurt when you bite?
Do you ever have a fright?
Do you want to sleep at night?
It's the Flu!

Are you thirsty when you eat?
It's the Flu!
Are you shaky on your feet?
It's the Flu!
If you feel a little ill
Send right off for Doctor Pill,
He will say, despite his skill:
"It's the Flu!"

He won't wait to diagnose,
It's the Flu!
Hasn't time to change his clothes,
It's the Flu!
For two weeks he's had no rest,
Has no time to make a test,
So he'll class you with the rest—
It's the Flu!

—Cincinnati Enquirer.

The public, they are wild
About the Flu!
Some of them act like a child
About the Flu!
"Olin's" diagnosis is the best
When he pulls down his vest,
The doctors know the rest
About the Flu!

—Editor.

NEW AND NON-OFFICIAL REMEDIES.

Lutein Tablets-H. W. and D., 2 Grains.—Each tablet contains 2 grains of lutein (the fully developed corpora lutea of the hog, dried and powdered). Hynson, Westcott and Dunning, Baltimore, Md. (*Jour. A.M.A.*, Nov. 2, 1918, p. 1485).